

Appendix K

Community Impact Assessment Technical Memorandum

DRAFT

Appendix K

COMMUNITY IMPACT ASSESSMENT

TECHNICAL MEMORANDUM

for

Intermodal Container Transfer Facility at the Former Charleston Naval Complex

Prepared by: Atkins

April 18, 2016

TABLE OF CONTENTS

1.	Project Description.....	1
2.	Methodology.....	3
3.	Community Study Areas.....	3
3.1.	Direct Community Impact Area	3
3.2.	Demographic Study Area	4
4.	Regional/Community Context.....	4
5.	Public Involvement Summary	5
6.	Community Demographics	6
6.1.	Population Characteristics	6
6.2.	Economic Characteristics	8
6.3.	Environmental Justice	11
6.4.	Housing Characteristics.....	12
7.	Notable Features Inventory	13
7.1.	Neighborhoods.....	13
7.2.	Institutional and Cultural Facilities	16
7.3.	Community Services.....	17
7.4.	Public Recreational Facilities.....	19
7.5.	Other Notable Community Resources	20
7.6.	Pedestrian and Bicycle Facilities	21
7.7.	Transit, Freight and Airport Facilities.....	22
8.	Community Cohesion.....	23
8.1.	Community and Neighborhood Organizations	24
8.2.	Previous Litigation, Settlement Agreement, and Community Mitigation Plan	25
8.3.	Community Concerns.....	27
9.	Community Impacts.....	28
9.1.	Physical Impacts.....	28
9.2.	Community Resource, Cohesion and Stability Impacts	33
9.3.	Economic and Business Resource Impacts	36
9.4.	Mobility and Access Impacts.....	38
9.5.	Community Safety and Emergency Response Impacts.....	41
9.6.	Overall Impacts to Neighborhoods and Environmental Justice Considerations.....	43
9.7.	Recurring Community/Neighborhood Impacts.....	47
9.8.	Summary of Socioeconomic and Environmental Justice Impacts by Alternative	47
10.	Recommendations	56

List of Tables

Table 1:	Summary of Alternatives	2
Table 2:	DSA Census Block Groups	4
Table 3:	Annual Unemployment Rate	9
Table 4:	Largest Public and Private Sector Employers, Charleston, SC, MSA.....	10
Table 5:	Project Area Neighborhoods by Census Tract and Block Group.....	14
Table 6:	Summary of Socioeconomic and Environmental Justice Impacts by Alternative	46

List of Figures (figures follow text)

- Figure 1: Project Location Map
- Figure 2: Demographic Study Area and Notable Populations
- Figure 3: Socioeconomic Resources Map
- Figure 4: Neighborhoods
- Figure 5: Project Alternatives

Appendices

- Appendix A: Public Involvement Summaries
- Appendix B: Census Demographic Tables
- Appendix C: Settlement Agreement

DRAFT

1. Project Description

Palmetto Railways proposes to construct and operate an Intermodal Container Transfer Facility (ICTF) on the former Charleston Naval Complex (CNC) in North Charleston, South Carolina. The ICTF would provide equal access to the two Class I rail carriers serving Charleston – CSX Transportation and Norfolk Southern Railway.

Features of the ICTF site would include railroad tracks for the processing and classification of containers, wide-span gantry cranes, container stacking areas, administrative buildings, and vehicle driving lanes. The off-site infrastructure improvements would include the north and south rail leads, a private drayage road connecting to the South Carolina State Ports Authority (SCSPA) Hugh K. Leatherman, Sr. Terminal (HLT) container facility (currently under construction at the CNC), an overpass connecting Cosgrove Avenue to McMillan Avenue, removal of the existing Viaduct Road overpass, and improvements to Bainbridge Avenue. A project location map is shown on **Figure 1**.

Two sites, known as River Center and Clemson (Palmetto Railways proposed project), are being considered for construction of the ICTF. While only one site will be selected for construction of the ICTF, it is assumed that the other site will be developed as rail-served warehousing in the future.

An Environmental Impact Statement (EIS) for the potential impacts associated with the proposed construction and operation of the project is being prepared by the US Army Corps of Engineers, Charleston District.

Table 1 summarizes the No Action Alternative, seven action alternatives, and Related Activities that will be evaluated in the Draft EIS.



Palmetto Railways Engine in the Project Area

Table 1: Summary of Alternatives

Alternative	Description
No Action Alternative	The Proposed Project would not occur; CSX and NS would undertake operational and structural modifications to Ashley Junction and 7-Mile rail yards. Future use of the Proposed Project and River Center sites would likely be mixed-use and industrial (e.g., rail-served warehousing distribution center).
Alternative 1: Applicant's Proposed Project (CSX – Southern to Milford / NS – Hospital District)	Palmetto Railways Project would be constructed and operated on a 130-acre site. Features of the ICTF site would include railroad tracks for the processing and classification of containers, wide-span gantry cranes, container stacking areas, administrative buildings, and vehicle driving lanes. The off-site infrastructure improvements would include the north and south rail leads, a private drayage road connecting to the South Carolina State Ports Authority (SCSPA) Hugh K. Leatherman, Sr. Terminal (HLT) container facility (currently under construction at the CNC), an overpass connecting Cosgrove Avenue to McMillan Avenue, removal of the existing Viaduct Road overpass, and improvements to Bainbridge Avenue.
Alternative 2: Proposed Project Site (CSX – Southern to Milford / NS – S-line)	A variation of the Proposed Project where the northern rail connection for NS would be relocated along Spruill Avenue within existing CSX ROW to the S-line, and turn east along Aragon Avenue to the existing NCTC rail line; road and rail improvements would be adjusted accordingly to facilitate rail and road traffic as a result of the NS northern rail connection alignment.
Alternative 3: Proposed Project Site (CSX – Southern to Kingsworth / NS – Hospital District)	A variation of the Proposed Project where the southern rail connection for CSX would connect to an existing CSX rail line near Kingsworth Avenue (and adjacent to existing NS rail and ROW); road and rail improvements would be adjusted accordingly to facilitate rail and road traffic as a result of the CSX southern rail connection alignments.
Alternative 4: Proposed Project Site (CSX & NS – Southern to Milford)	A variation of the Proposed Project where NS, like CSX, would also enter and exit the Navy Base ICTF from a southern rail connection, with NS connecting to an existing NS rail line near Milford Street (and adjacent to existing CSX rail and ROW). Proposed rail through the Hospital District would stop short of Noisette Creek.
Alternative 5: River Center Site (CSX – Southern to Milford / NS-Hospital District)	A variation of the Proposed Project with the project site being moved to the River Center Site; road and rail improvements would be adjusted accordingly to facilitate rail and road traffic at the new site.
Alternative 6: Alternative 6: River Center Site (CSX – Southern to Kingsworth / NS-Hospital District)	A variation of the Proposed Project with the project site being moved to the River Center Site and the southern rail connection for CSX would connect to an existing CSX rail line near Kingsworth Avenue (and adjacent to existing NS rail and ROW). Road and rail improvements would be adjusted accordingly to facilitate rail and road traffic at the new site.
Alternative 7: River Center Site (CSX & NS Southern to Milford)	A variation of the Proposed Project with the project site being moved to the River Center Site and NS, like CSX, would also enter and exit the Navy Base ICTF from a southern rail connection; road and rail improvements would be adjusted accordingly to facilitate rail and road traffic at the new site.

Related Activities associated with the action alternatives include reactivation of idle rail lines and new at-grade rail crossings. If the Proposed Project was constructed, a section of unimproved CSX ROW would have to be activated with rail lines that would accept intermodal trains at the proposed new at-grade crossing at Meeting Street in the vicinity of Herbert Street. This construction would terminate in the vicinity of Accabee Road. This Related Activity would apply to Alternatives 1, 2, 4, 5, and 7.

Under Alternatives 3 and 6, the Related Activity construction would begin at the proposed new at-grade crossing at Meeting Street in the vicinity of Kingsworth Avenue and would terminate in the vicinity of Accabee Road.

Under Alternative 2 an additional Related Activity, reactivating an out-of-service ROW and constructing a new railroad bridge, would be required to connect the NS lead track from the ICTF across a portion of marsh which drains to Noisette Creek to the existing NCTC track along Virginia Avenue.

2. Methodology

This report outlines the existing conditions and trends of the area surrounding the proposed project. It inventories community resources, issues and concerns and documents potential community impacts that may result from construction and operation of the project. Sources of information reviewed for this report include data gathered from the US Census, regional socioeconomic projections, and data from local plans, policies, maps and regulations. This report further includes observations from field visits and interviews with local planners, community leaders and citizens in an effort to document resources as well as community vision, values and goals.

Census data and socioeconomic projections are used to evaluate trends in population and economic characteristics in the project area. Information from local mapping, plans, and interviews with local planners and citizens is used to document community resources, travel patterns, sensitive populations, community initiatives, and sources of community cohesion. This information is evaluated in terms of the proposed project to determine how these resources would be impacted.

3. Community Study Areas

This Community Impact Assessment has two study areas: the Direct Community Impact Area (DCIA) and the Demographic Study Area (DSA). These study areas are shown on **Figure 2** and described in detail in the following sections.

3.1. Direct Community Impact Area

The Direct Community Impact Area (DCIA) is the area surrounding the project that is likely to be directly affected in any way during, throughout, and after construction of the project. This study area encompasses all of the areas examined for potential community impacts as a result of the project. The DCIA is shown as a dashed purple line on **Figure 2**.

The DCIA boundary includes both the Clemson and River Center alternative sites, as well as nearby and adjacent properties. The northern boundary of the DCIA extends generally to Noisette Creek and includes the River Center alternative site the area around the Spruill Avenue/Bexley Avenue intersection where rail improvements are proposed. To the south, the DCIA extends generally to Stromboli Avenue to include the Clemson alternative site and to the southeast it extends to include the Federal Law Enforcement Training Center and proposed drayage roads to the port. The western boundary generally follows Spruill Avenue and includes adjacent housing in the Chicora-Cherokee neighborhood west of Spruill Avenue from McMillian Avenue south to Stromboli Avenue. The eastern boundary generally follows Noisette Boulevard/Hobson Avenue.

3.2. Demographic Study Area

The Demographic Study Area (DSA) is defined to identify and analyze demographic characteristics for the community surrounding the project. The DSA contains the 2010 census block groups that include the DCIA. The DSA is outlined with a yellow and black dashed line on **Figure 2** and includes the 16 block groups listed in **Table 2**, all of which are located in Charleston County. The DSA generally includes the southeastern portion of the City of North Charleston bounded by I-526 to the north, Meeting Street to the west, US 17 to the south, and the Cooper River to the east.

2010 Census vs American Community Survey

The U.S. Census is conducted once every 10 years to provide an official count of the entire US population and report basic characteristics (e.g., sex, age, race, origin, and homeowner status).

The American Community Survey (ACS) is conducted every year to provide up-to-date information about social and economic characteristics (e.g., age, sex, race, income, education, and commuting information). About 1 in 38 households per year receives an invitation to participate in the ACS. ACS data is available in 1-year, 3-year, or 5-year estimates. 5-year estimates are best for analyzing small populations when precision and reliability are important.

Demographic information was obtained from the most current data available, which includes the 2010 US Census, American Community Survey (ACS) 5-Year Estimates (2008–2012), and other state and local sources. Demographic data for Census block groups in the DSA were compared to demographic data for the cities of Charleston and North Charleston, and Charleston County to identify notable population groups and trends.

Table 2: DSA Census Block Groups

2010 Census	
Census Tract	Block Group(s)
35	1, 2
36	1, 2, 3
37	1, 2, 3
43	1, 2, 3, 4
54	1, 2
55	1, 2

Source: US Census Bureau, 2010

Demographic characteristics and trends in the project area are discussed in **Section 6**.

4. Regional/Community Context

The project is located in the southern portion of the City of North Charleston, near its boundary with the City of Charleston, on the site of the former Charleston Naval Complex (CNC). North Charleston is located near the beginning of the peninsula that lies at the center of the Charleston metropolitan

region. North Charleston is the third largest city in the state with an estimated current total population of just over 100,000 people.

The Navy base was a major presence in North Charleston and its closure in 1996 had a marked impact on the City's economy. According the North Charleston Comprehensive Plan Update (2008), labor force participation still remains much lower today compared to when the base was open, especially for the male population. In 2001, the Noisette Company partnered with the City of North Charleston to develop a plan for the sustainable redevelopment and revitalization of North Charleston. In 2003, the Noisette Community Master Plan was released for approximately 350 acres that included the City's historic core and the north end of the former CNC. In keeping with this plan, a row of former Navy warehouses and buildings between Noisette Boulevard and Hobson Avenue have been successfully converted into new offices, art studios, restaurants, and workshops. In addition, a low-income housing complex, West Yard Lofts, was developed in the northern portion of the project area, along with the Lowcountry Innovation Center and Riverfront Park. In 2009, the Noisette Company lost most of its holdings on the former CNC property to foreclosure and these properties were ultimately purchased by the SC Department of Commerce.

In general, the economy of North Charleston is fueled by military establishments (Charleston Air Force Base and Naval Weapons Station), retail shopping malls, hotels, port terminals, major manufacturers, and a growing technology base. There are limited employment opportunities available within the project area. The shipyards located along the Cooper River just east of the project area are some of the nearest major employers. In addition, the Clemson University Restoration Institute, a new research facility to develop environmentally sustainable technologies, is located on Supply Street adjacent to the project area and the Federal Law Enforcement Training Center, one of only three such facilities in the nation, is located on 200 acres in the southern portion of the project area.

The project area includes portions of approximately 20 named neighborhoods, three parks, one recreation center, approximately 15 churches, two private schools and three public schools. Small offices, businesses, and non-profit organizations are scattered throughout the project area with the largest offices located on the northern portion of the former CNC (north of McMillan Avenue).

There are numerous opportunities for redevelopment or adaptive reuse of properties in the project area. There are many neglected or vacant residential and commercial properties, especially in the central and southern portions of the project area. Several community organizations have taken an interest in promoting the redevelopment and revitalization of these areas, as discussed further in **Section 8**.



West Yard Lofts.

5. Public Involvement Summary

Information gathered from public meetings and interviews local stakeholders was used in the development of this report. Comments provided at public scoping meetings (November 14, 2013 and October 27, 2015) and a community meeting on May 6, 2014 were reviewed to identify comments related to community resources and concerns. In addition, the May 2014 community meeting included

a station with a large flipchart where attendees could record their concerns. The station was attended by two project team members to discuss and record community concerns.

Interviews were conducted with local planners and representatives of community groups in May 2014 to provide additional information for this report. Specifically, interviews were conducted with the following:

- Metanoia
- City of North Charleston
- Berkeley-Charleston-Dorchester Council of Governments (BCDCOG)
- Local Alliance for Model Communities (LAMC)

Summaries of these interviews are provided in **Appendix A**.

In addition, members of the project team attended regularly scheduled meetings of several neighborhood organizations in the project area in to answer questions about the project and listen to community concerns. Specific meetings attended were as follows:

- July 28, 2014 – Chicora-Cherokee
- August 12, 2014 – Union Heights
- August 13, 2014 – Olde North Charleston, Palmetto Gardens, Cameron Terrace, Northeast Park Circle.
- January 27, 2016 – 1799 Meeting Street Rd. Tenants Meeting
- February 1, 2016 – Hunley Waters
- February 8, 2016 – Metanoia Town Hall
- February 16, 2016 – Marinex Construction / Salmons Dredging

Summaries of these meeting are also included in **Appendix A**.

6. Community Demographics

This section provides a description of demographic trends in the Demographic Study Area (DSA), identifies notable population groups, and includes a discussion on community cohesion and community concerns. Census information related to community demographics is presented in **Tables B-1** through **B-16** in **Appendix B**.

6.1. Population Characteristics

The following discussion of population characteristics focuses on population trends, age distribution, racial/ethnic composition, and Limited English Proficiency populations.

Population Trends

From 2000 to 2010, the overall population of the DSA decreased from 16,248 to 13,236, or 18.5 percent (average annualized decrease of 2.0 percent). The population loss is in stark contrast to the population increases of the City of North Charleston (22.4 percent) and Charleston County (13 percent) over the same period, as shown in **Table B-1**. In general, the population loss is attributed to closure of the Charleston Naval Complex in 1996, clearing of land to make way for redevelopment projects, and the instability of the project area amid speculation about how the area may redevelop.

Future Population

Future population estimates for Charleston County and the state, according to the South Carolina Revenue and Fiscal Affairs Office, are shown in **Table B-2** in **Appendix B**. The estimated annualized future growth rates of less than one percent for the county and state through the year 2030 are lower than the growth rates observed for these areas between the 2000 and 2010 Census. It is anticipated that population growth within the DSA will continue to be below the rates anticipated for the county and state, especially given the industrial nature of the development proposed in the project area. However, some pockets of residential development are currently being developed in the DSA and additional redevelopment of residential areas outside the project area may occur by 2030 and may lead to slight increases in the population of the DSA.

Age Distribution

Overall, the percentages of the DSA population in all age groups are similar to those of the City of North Charleston and the county. However, two block groups in the DSA have notably higher percentages of persons under the age of 18 compared to Charleston County, and one block group has a notably higher percentage of persons aged 65 and over. Over 55 percent of the population of Census Tract 54, Block Group 2 in the southern end of the DSA is under the age of 18. Further investigation identified a large affordable housing complex, the Bridgeview Village Apartments, located in this block group well south of the project study area at 108 North Romney Street in Charleston.

The second concentration of children (37.9 percent) is located in Census Tract 37, Block Group 2 in the northwestern DSA, north of McMillan Avenue and west of Spruill Avenue. Further investigation identified a large apartment complex, St. Charles Place, located at 1920 McMillan Avenue that was previously owned by the North Charleston Housing Authority and provided low-income housing. This complex consists of approximately 464 apartments and is located just outside the project study area.

There is higher concentration of persons age 65 and older in Census Tract 35, Block Group 2 located in the northwestern corner of DSA, which includes a portion of the Park Circle neighborhood.

The age distributions of the population of the DSA and each block group, as well as the cities of North Charleston and Charleston and Charleston County, are shown in **Table B-3**.

Race & Ethnicity

The racial compositions of the DSA, the cities of Charleston and North Charleston, and Charleston County are shown in **Table B-4**. The DSA has a notably higher percentage of Black or African American residents (67.1 percent) in comparison to the City of North Charleston (47.2 percent), the City of Charleston (25.4 percent), and Charleston County (29.8 percent).

The percentage of Black or African American residents in 11 of the 16 block groups within the DSA exceeds 50 percent of the total population, with percentages ranging from 68 to 97 percent. These include all the block groups in the central and southern portion of the DSA.

Data also was obtained from the US Census 2010 to identify populations of Hispanic or Latino origin, as summarized in **Table B-5**. The US Census recognizes Hispanic or Latino as an ethnic category that can include persons of any race. As a result, the Hispanic or Latino population is discussed exclusive of race. The Hispanic percentage of the DSA population (4 percent) is similar to the county (5.4 percent), but less than the City of North Charleston (10.9 percent).

Limited English Proficiency (LEP)

Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency," requires all recipients of federal funds to provide meaningful access to persons who are limited in their English proficiency (LEP). The US Department of Justice defines LEP individuals as those "who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English" (67 FR 41459).

The DSA does not meet the US Department of Justice's Safe Harbor threshold for presence of a Limited English Proficiency (LEP) population, as identified in guidance issued by the USDOT's *Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient Persons* (2005). This guidance defines the Safe Harbor threshold as either five percent of the DSA population or 1,000 persons within a particular language group who speak English less than "Very Well". If the Safe Harbor threshold is met or exceeded for a LEP group, vital written materials should be translated. Data was used from the ACS 5-Year Estimates (2009-2013) to identify adults aged 18 or older who speak English less than "Very Well" by language group. Results of the LEP analysis are shown in **Table B-6**.

Although the Safe Harbor threshold was not met for the translation of vital documents, US Census data indicates notable populations (more than 50 persons) of Spanish language speakers who speak English less than "Very Well" in two block groups, as identified by shaded cells in **Table B-6**. Census Tract 35, Block Group 1, located directly north of the study area, includes 51 Spanish-speaking LEP adults. Census Tract 36, Block Group 2, located just northwest of the project study area, includes 69 Spanish-speaking LEP adults. Spanish language assistance should be offered for Spanish-speaking individuals within the study area during the project development process to ensure they are provided meaningful access to project information. Assistance could be in the form of oral interpretation and notices in special media.

Educational Attainment

The educational attainment of the population of the DSA is shown in **Table B-7**. Overall, the percentage of the population of the DSA without a high school diploma (26.3 percent) is slightly higher when compared to the population of the City of North Charleston (20.3 percent) and more than double when compared to Charleston County (11.7 percent). The population percentage without a high school diploma exceeds 40 percent in four block groups in the DSA. These block groups include the River Place Apartments and the northern end of the project study area as well as parts of the Chicora-Cherokee neighborhood. Similarly, the percentage of people in the DSA with a college degree (19.1 percent) is much lower compared to Charleston County (46.9 percent).

6.2. Economic Characteristics

The following sections summarize the economic characteristics of the DSA, including median household income, population living below poverty level, unemployment, major employers, and commuting patterns. Census data related to these topics is presented in **Tables B-8 through B-12** in **Appendix B**.

Median Household Income

Data on median household income within the DSA is shown in **Table B-8**. The median household income for 13 of the 16 block groups in the DSA is lower than both the city and the county. The DSA block group (Census Tract 54, Block Group 2) with the lowest median household income (\$6,263) is located in the southern portion of the DSA, south of the project study area, and includes the Bridgeview Village low-income apartment complex. The DSA block group (Census Tract 36, Block Group 3) with the highest median household income (\$70,500) is located in the northern portion of the DSA in the Park Circle neighborhood and includes the new Mixson mixed-use development. **Table B-9** shows the household

income for the DSA in comparison to the City of North Charleston, the City of Charleston, Charleston County, and South Carolina.

Low-Income Households

For the purposes of this study, the low-income population is defined as households with a median household income at or below the U.S. Department of Health and Human Services (HHS) 2014 Poverty Guidelines. The 2014 Poverty Guideline for the 48 contiguous states and the District of Columbia is \$23,850 for a four-person household.

The ACS provides household income in \$5,000 increments. The HHS 2014 Poverty Guideline is within the \$20,000 to \$24,999 increment. As a result, all households in this increment and below (regardless of the number of individuals in the household) are considered low income. **Table B-10** identifies the percentage of low-income households in each block group of the DSA. Over half of the households within the DSA are considered low-income and four block groups in the DSA, including three that include the Chicora-Cherokee neighborhood, have low-income percentages that exceed 70 percent.

Unemployment

The annual average unemployment rates for the Charleston-North Charleston-Summerville Metropolitan Statistical Area, Charleston County, and the state of South Carolina over the last decade are shown in **Table 3**. In each year, the unemployment rates for the MSA and Charleston County are slightly lower than for the state as a whole. The impact of the recent recession on unemployment rates is evident in the large increase in unemployment rates after 2008. For example, unemployment rates in Charleston County increased from 5.3 percent in 2008 to 8.9 percent in 2009. The most current data available from the Bureau of Labor Statistics for Charleston County is October 2014, when the average unemployment rate was 5.3 percent.

Table 3: Annual Unemployment Rate, 2004-2013 (%)

Year	Charleston-North Charleston-Summerville Metropolitan Statistical Area	Charleston County	South Carolina
2004	NA	5.4	6.9
2005	NA	5.5	6.8
2006	NA	5.0	6.4
2007	NA	4.3	5.6
2008	NA	5.3	6.8
2009	9.5	8.9	11.4
2010	9.2	9.1	11.1
2011	8.5	8.3	10.3
2012	7.4	7.2	9.0
2013	6.3	6.0	7.6

Sources: Bureau of Labor Statistics, SC Department of Employment and Workforce,
<http://data.bls.gov/timeseries/LASST450000000000003>
NA = Not Available

Major Employers

The fifteen largest employers in the Charleston Metropolitan Statistical Area (MSA) as of February 2013 are shown in **Table 4**. The top employer, U.S. Air Force Joint Base Charleston, is located approximately

six miles northwest of the project study area. The Charleston County School District is the only employer listed that has locations that provide work opportunities within the project study area.

Table 4: Largest Public and Private Sector Employers, Charleston MSA

Rank	Company	Sector	Product or Service	Employees
1	Joint Base Charleston	Public	Area U.S. military commands	22,000
2	Medical University Of South Carolina (MUSC)	Public	Hospital, post-secondary education, research	13,000
3	Boeing South Carolina	Private	Aircraft manufacturing	6,000
4	Charleston County School District	Public	Education/public schools	5,300
5	Roper St. Francis Healthcare	Private	Roper and Bon Secours St Francis Hospitals	5,100
6	Berkeley County School District	Public	Education/public schools	3,700
7	Dorchester County School District II	Public	Education/public schools	3,100
8	JEM Restaurant Group Inc.	Private	Taco Bell and Pizza Hut Franchises in the MSA	3,000
9	Trident Health System	Private	Hospital system	2,500
10	Walmart Inc.	Private	Retail merchandise	2,300
11	Robert Bosch LLC	Private	Antilock brake systems, fuel injectors, common rail & unit injectors	2,200
12	Charleston County	Public	Local government	2,100
13	College Of Charleston	Public	Post secondary education	2,000
14	Piggly Wiggly Carolina Co Inc.	Private	Grocery wholesaler/retailer headquarters, distribution center	1,800
15	SAIC	Private	System engineering and integration services	1,800

Source: Center for Business Research, Charleston Metro Chamber of Commerce, February 2013

Commuting

Based on travel time to work data from the ACS 5-Year Estimates (2009-2013), travel times to work for residents living in the DSA are generally less than travel times for Charleston County as a whole. This is consistent with the urban nature of the project area and location of many large employers and employment centers located within 10 miles north and south of the project study area. Approximately 53 percent of DSA residents reported traveling less than 20 minutes to work, whereas only 45 percent of Charleston County residents reported traveling less than 20 minutes to work. **Table B-11 in Appendix B** presents travel time to work for all block groups within the DSA.

Table B-12 in Appendix B summarizes the transportation mode reported in the ACS 5-Year Estimates (2009-2013) for commuters living in the DSA and Charleston County. The percentage of commuters in the DSA who use public transportation (9.7 percent) is four times the percentage for Charleston County as a whole (2.1 percent). The percentage of public transportation users is highest in Census Tract 43, Block Group 2, which is located in the Chicora-Cherokee neighborhood, at 49.5 percent. Three other block groups in the DSA also have a notably high percentage of public transportation users. Block groups with a high percentages of public transportation users generally correlate to block groups with no vehicle available (Table B-17).

Six block groups in the DSA, mostly in the northern portion, have a notably high number of carpoolers. The highest percentage of people who walk to work (21.7 percent) is in Census Tract 37 Block Group 3 in the north central DSA along St. John's Avenue. The highest percentage of people using taxicab,

motorcycle, bicycle, or other means is located in Census Tract 54, Block Group 1, which includes the Union Heights neighborhood.

6.3. Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations* (February 11, 1994) directs all Federal agencies to determine whether a proposed action would have a disproportionately high and adverse impact on minority and/or low-income populations.

An Environmental Justice analysis has been conducted to assess whether the DSA population meets the criteria for the presence of a minority and/or low-income population. The following subsections describe the regulatory requirements for this analysis, the methodology for assessing Environmental Justice populations, and the determination of whether the DSA includes populations that meet the Environmental Justice criteria.

Council on Environmental Quality

The Council on Environmental Quality (CEQ) is charged with overseeing the federal government's compliance with Executive Order 12898 and NEPA. CEQ, in consultation with the Environmental Protection Agency (EPA) and other affected agencies, issued guidance to further assist federal agencies with their NEPA procedures so that Environmental Justice concerns are effectively identified and addressed (CEQ, 1997). Among other things, the document provides a summary of Executive Order 12898 and NEPA, principles for considering Environmental Justice under NEPA, and guidance for considering Environmental Justice in specific phases of NEPA, including scoping, analysis, alternatives development, and mitigation.

The CEQ defines minority as individuals who belong to one of the following population groups:

- American Indian or Alaskan Native;
- Asian;
- Pacific Islander;
- Black, not of Hispanic origin; or
- Hispanic

A minority population exists when “the minority population of the affected area exceeds 50 percent or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis” (CEQ, 1997).

According to the CEQ guidance, low-income populations should be identified with data from Bureau of the Census' Series P-60 on Income and Poverty. This Census no longer provides data in this series. As a result, for the purposes of this study, low-income is defined as households with a median household income at or below the U.S. Department of Health and Human Services (HHS) 2014 Poverty Guidelines. The 2014 Poverty Guideline for the 48 contiguous states and the District of Columbia is \$23,850 for a four-person household. For the purposes of this Environmental Justice analysis, a low-income population exists where the low-income percentage of a block group exceeds 50 percent of the total households in that block group.

Based on the demographic data presented in **Sections 6.1 and 6.2**, the DSA includes both minority and low-income populations that meet the criteria for Environmental Justice populations. Block groups that meet the criteria for low-income and/or minority Environmental Justice populations are identified in **Table B-13** and **Figure 1**.

Based on data from the 2010 US Census as shown in **Table B-4**, 11 of the 16 block groups in the DSA have Black or African American minority populations that meet CEQ guidelines for the presence of a minority Environmental Justice population (i.e., the minority population exceeds 50 percent of the total population). Two block groups located north of Bexley Street have Black or African American minority populations that are near the CEQ guidelines for the presence of a minority Environmental Justice population.

The ACS Five-Year Estimates (2009-2013) provide household income in \$5,000 increments. The HHS 2014 Poverty Guideline (\$23,850) is within the \$20,000 to \$24,999 increment. As a result, all households with incomes in this increment and below (regardless of the number of individuals in the household) are considered low income. Based on data from the ACS 5-Year Estimates (2009-2013) as shown in **Table B-10**, the overall low-income population percentage of the DSA is 56 percent and 11 of the 16 block groups in the DSA meet the criteria for the presence of a low-income Environmental Justice population (i.e., the percentage of low-income households exceeds 50 percent).

Potential impacts to Environmental Justice populations are discussed in **Section 9.6** at the end of this report.

6.4. Housing Characteristics

The following discussion of housing characteristics includes number of housing units, age of housing, median home values, home ownership, and vehicle availability. Tables summarizing this data are included as Tables B-14 through B-19 in **Appendix B**.

Housing Trends

In contrast to housing growth in North Charleston and Charleston County, the number of housing units in the DSA decreased 13 percent between 2000 and 2010, as shown in **Table B-14**. This is likely related to the Charleston Naval Complex closure and clearing of land related to subsequent redevelopment initiatives in the area, such as the Noisette Project. The block group that experienced the greatest loss of housing is Census Tract 36, Block Group 3, located in the northwestern portion of the DSA. The number of housing units in this block group decreased by half, from 495 to 231, between 2000 and 2010. During this time, a portion of the housing in this block group was razed for redevelopment, resulting in a loss of housing units. This area has since been redeveloped as Mixson, which includes new housing and mixed-use development.

According to local planners, the decline in population and housing in the project study area has leveled off since 2010 and there has been some new housing construction, including West Yard Lofts, which provides low-income multi-family housing in the northern portion of the project study area, and Hunley Waters, a new single-family housing development on O'Hear Avenue near the northern boundary of the project study area.

Age of Housing

Approximately 67 percent of the existing housing in the DSA was built before 1970, as shown in **Table B-15**. This is more than double the percentage in the City of North Charleston (30 percent) and Charleston County (30.5 percent). The higher percentage of older homes in the DSA is expected due to development associated with the Navy Base expansion during World War II.

Only three block groups in the DSA have housing units built since 2010. Census Tract 37, Block Group 3, located directly north of the study area includes new homes in the Hunley Waters community. Census Tract 55, Block Group 1, which includes a large portion of the project study area, includes new housing

units in the Navy Yard Lofts affordable housing complex. New housing units have also been constructed in Census Tract 55, Block Group 1, but these units appear to be located outside the project study area.

Median House Values

According to ACS 5-Year Estimates (2009-2013), median house values within the DSA vary widely by block group, as shown in **Table B-16** in **Appendix B**. There is not enough information in five of the 16 block groups to calculate a median value. House values in the northern DSA are generally higher when compared to the City of North Charleston. No block groups in the DSA have house values higher than the median values for Charleston or Charleston County.

Home Ownership

Occupancy Status of housing units in the DSA is shown in **Table B-17**. The percentage of owner-occupied housing units in the DSA (30.2 percent) is lower than both the City of North Charleston and the county. The percentage of renter-occupied housing units in the DSA (54.8 percent) is higher than both the city and county. Twelve of the 16 block groups have a notably higher percentage of renter occupied units when compared to the county.

Vehicle Availability

Data on vehicle availability by occupied housing units is shown in **Table B-18** in **Appendix B**. The percentage of housing units in the DSA without a vehicle (27.48 percent) is notably higher when compared to the City of North Charleston (11.3 percent) and Charleston County (8.5 percent). More than half of the occupied housing units in the Chicora-Cherokee neighborhood (Census Tract 43, Block Groups 1-3), located in the central project study area, do not have a vehicle available. This indicates that many people in this neighborhood rely on transit, walking, and biking to reach their destinations.

7. Notable Features Inventory

The following section provides a summary of notable features located within and near the DCIA. To assist in this discussion, a Socioeconomic Resources Map is provided as **Figure 3** and shows notable features within or near the DCIA. Neighborhoods within and surrounding the DCIA are shown on **Figure 4**. The notable features discussed in the following sections are described by category.

7.1. Neighborhoods

Neighborhoods within and surrounding the DCIA are shown on **Figure 4**. Neighborhood boundaries were provided by the City of North Charleston. In order to describe general social and economic characteristics, the neighborhoods within the DSA are grouped by census tract and block group, as shown in **Table 5**. General descriptions of neighborhoods within each census tract are provided below based on information from Census and economic data, site visits, discussions with local planners, public involvement activities, and local planning documents.

Table 5: Project Area Neighborhoods by Census Tract and Block Group

2010 Census Geography		North Charleston Neighborhoods
Census Tract	Block Group	
35	1	Park Circle, Oak Park, Palmetto Gardens, Cameron Terrace
	2	
36	1	Liberty Hill, Olde North Charleston, Mixson Avenue
	2	
	3	
37	1	Whipper Barony, Horizon Village, Hunley Waters, St. Charles Place Apartments
	2	
	3	
*43	1	Chicora Place, Cherokee Place, Nafair
	2	
	3	
	4	
*55	1	
	2	
54	1	Windsor, Union Heights
	2	

*These census tracts include most of the project study area (i.e. areas with the greatest potential for direct impacts as a result of project alternatives).

Park Circle, Palmetto Gardens, Cameron Terrace, and Oak Park

These neighborhoods are located in Census Tract 35 in the northern DSA. Park Circle and Palmetto Gardens were developed during the housing boom of the World War II era in the 1940s and 1950s. Cameron Terrace/Oak Park is located just south of I-526 and was developed in the 1950s and 1960s. The population of these neighborhoods is predominantly white, with median household incomes similar to the City of North Charleston as a whole. These neighborhoods also have the highest percentage of owner-occupied housing in the DSA and the lowest percentage of vacant housing units.

Community cohesion for this area is centered on the Park Circle community feature, which includes a playground, baseball fields, and the Felix C. Davis Community Center, and the commercial/retail corridor along Montague Avenue.

These neighborhoods are not located within the project study area and would not be directly impacted, but have expressed concern about indirect effects in the form of increased rail traffic.

Liberty Hill, Olde North Charleston, and Mixson

These neighborhoods are located in Census Tract 36 in the northern DSA on the south side of Park Circle and just north of the project study area. Liberty Hill dates back to the 1870s, and is one of the earliest home ownership developments created for freed slaves. Olde North Charleston generally includes the southeastern quadrant of Park Circle from Durant Avenue to East Montague Avenue and was part of the original plan developed for the Park Circle area in the early 20th Century. Mixson was recently redeveloped as a mixed-use community.

The population of these neighborhoods is generally half white and half African American, with median household incomes that are slightly below the city average. This census tract has a higher percentage of renter occupied housing than owner occupied housing. The Park Circle community feature is also a source of community identity for these neighborhoods and they have expressed concern about additional rail traffic through their neighborhoods.

Whipper Barony, Hunley Waters, and St. Charles Place Apartments

These neighborhoods are located in Census Tract 37 in the north central DSA and include the northwest corner of the project study area. Whipper Barony was developed to meet the local housing shortage in the years just before World War II. Horizon Village is a mixed-income, mixed-tenure neighborhood with 458 rental units and 194 ownership units developed in partnership with the North Charleston Housing Authority. Hunley Waters is a new gated community with 36 single-family homes located on O'Hear Avenue just north of the River Center alternative site. River Place includes the St. Charles Place Apartments, built in 1941, which includes 464 apartment units on 41 acres on the north side of McMillan Avenue. At one time this complex was owned by the North Charleston Housing Authority. The population of these neighborhoods is over 60 percent Black or African American and has median household incomes that range from \$18,700 to \$35,400 each year. Over half of the housing in these neighborhoods is renter occupied.



Chicora-Cherokee Neighborhood Sign

Chicora Place, Cherokee Place, Nafair

These neighborhoods are located in the central DSA and immediately to the west of the proposed project in the project study area and have the greatest potential to be impacted by the proposed project. Chicora Place and Cherokee Place are locally referred to as the Chicora-Cherokee neighborhood. Homes in this neighborhood abut the proposed project site.

The population of these neighborhoods is over 80 percent Black or African American, with median household incomes less than \$19,000 each year. Approximately three-quarters of the households in these areas are low-income and the majority of housing is renter occupied. There is a heavy reliance on transit, walking, and biking in these neighborhoods since approximately half of the households do not have a vehicle available. These neighborhoods have an active neighborhood council and a strong community identity. Community cohesion is centered around the Gussie Green Community Center and the Chicora Place Community Garden and adjacent playground, which host numerous neighborhood events and meetings. Sterett Hall, which provides important arts and recreational opportunities as well as meeting and performance space, is also a source of community cohesion for this neighborhood.

Windsor and Union Heights

These neighborhoods are located in Census Tract 54 in the southern DSA, south of the project study area. Residences in these neighborhoods are concentrated between Meeting Street/Carner Avenue and Spruill Avenue, with Windsor located directly to the north of Union Heights. The population of these neighborhoods is over 95 percent Black or African American, with median household incomes less than \$19,000 each year. Over 40 percent of the occupied housing units are renter occupied, and over 32

percent of the occupied housing units do not have a vehicle. Community cohesion in this area is centered on the Gethsemani Community Center. A mosque is also located in the Union Heights neighborhood.

7.2. Institutional and Cultural Facilities

The following institutional and cultural resources are located in or near the DCIA.

Schools

The DCIA is located within the service area of Charleston County Schools.

Elementary Schools

Children residing in the DCIA attend one of two elementary schools. Only one of these schools is currently located in DCIA, the Chicora School of Communications Elementary Magnet School.

- The Chicora School of Communications Elementary Magnet School is currently located at 3795 Spruill Avenue in a temporary facility while a new facility is being constructed next to the Military Magnet Academy located at 2950 Carner Avenue. This school is a partial magnet school with approximately 345 students in Child Development (CD) through grade 5. The boundary for this school attendance zone includes the project study area south of McMillan Avenue.
- North Charleston Elementary School is located well north of the project study area at 4921 Durant Avenue. This neighborhood school has an approximate enrollment of 566 students in CD through grade 5 and serves the portion of the project study area north of McMillan Avenue.

Middle and High Schools

Students residing in the DCIA are zoned to attend Morningside Middle School located at 1999 Singley Lane, and North Charleston High School located at 1087 East Montague Avenue. Both of these schools are located to the north of the DCIA. In addition to traditional schools, there are options for magnet and charter schools located throughout the county. Two of these schools are located in the DCIA:

- The Military Magnet Academy is a county-wide magnet middle and high school located just west of the project study area at 2950 Carner Avenue. Approximate enrollment is 546 students.
- Palmetto Scholars Academy was located in the study area at 2415 Avenue F. This charter school serves grades 6 to 12 and is recently moved to a new facility well outside of the study area in the Hunley Park development near the Charleston Air Force Base in December 2016.

Private Schools

There are two private schools located in the DCIA:

- The St. John Catholic School is a private school for students in grades K-8 located in the northern DCIA at 3291 St. John's Avenue. The church and school has a master plan for expansion on the current site.
- Owens Christian Academy is a small private school for children age 2 through first grade located at 3377 Ridgeway Street along the western edge of the DCIA.

Places of Worship

Places of worship identified in the project study area and shown on **Figure 3** include:

- St. John's Catholic Church is located at 3921 St. John's Avenue in the northern project study area.

- Washington United Methodist Church is located at 1816 Success Street in the central project study area.
- St. Matthew Baptist Church is located at 2005 Reynolds Avenue in the Chicora-Cherokee neighborhood in the central project study area.
- Emanuel Seed Harvest Time Church is located 2012 Reynolds Avenue in the Chicora-Cherokee neighborhood in the central portion of the study area.
- Salvation & Deliverance Church is located at 1916 Burton Lane in the southern portion of the project study area.

Eleven additional places of worship, consisting of neighborhood churches and one neighborhood mosque, are located in the Union Heights neighborhood, south of the proposed project site:

- House of God is located at 2050 Hampton Avenue.
- New St. John Holiness Church is located at 2026 Riverview Avenue.
- New Francis Brown United Methodist Church is located at 2517 Corona Street.
- Bethlehem Baptist Church is located at 1981 Arbutus Avenue.
- Evening of Prayer Church of God in Christ is located at 2361 Spruill Avenue.
- Grace Community Baptist Church is located at 2029 Delaware Avenue.
- Open Door United Bibleway Church of Christ is located at 2000 Groveland Avenue.
- Calvary AME Church is located at 2040 Groveland Avenue.
- Masjid Al Jami Ar Rasheed Mosque is located at 1998 Hugo Avenue.
- Promised Land Pentecostal Holiness Church is located at 2216 Meeting Street.
- Mt. Olive Baptist Church is located at 2416 Meeting Street.

The Saint Peter's Cemetery Extension is located at 2280 Spruill Avenue and is the only known cemetery in the DCIA.

Libraries

There are no libraries located in the DCIA. The nearest library, the Cooper River Memorial library, is located just to the west of the DCIA at 3503 Rivers Avenue, on the north side of Dorchester Road.

Post Offices

There are no post offices located within the DCIA. The nearest post office is located at 2180 McMillan Avenue, approximately one-quarter mile to the west of the DCIA.

7.3. Community Services

This section describes public services, including police, fire, and emergency medical services, provided to the DCIA, as well as any related facilities located within the DCIA. This section also describes health care facilities and grocery stores in the DCIA.

Fire Service

The North Charleston Fire Department is divided into 3 divisions with 11 fire stations located throughout the city. Station 2, located at 1791 North Hobson Avenue, is currently located within the study area.

However, this station will be combined with Station 8 (currently located just outside the study area at 2630 Meeting Street). Neither of these stations is shown on Figure 3. The new Station 2 is expected to open in January 2016 at the corner of Carner Avenue and Clement Avenue within the study area (shown on **Figure 3**). The new station will be the City's newest and largest fire station housing three fire companies (two engines and one aerial apparatus). The new Station 2 will include five bays for active and reserve trucks, a training facility, offices for the city's arson investigators, and crew living quarters. The next nearest station, Station 1, is located north of the study area near Park Circle at 4830 Jenkins Avenue.

Police Service

The City of North Charleston Police Department is divided into three bureaus – North, South, and Central. The central and southern portions of the project study area are served by the South Bureau and the northern portion of the project study area is covered by the Central Bureau. None of the bureau offices are located within the project DCIA, but the South Bureau office is located approximately one-quarter mile west of the project study area at 3401 Rivers Avenue, as shown on **Figure 3**.

Emergency Medical Services

Emergency medical services are provided by Charleston County Emergency Medical Services (EMS), which provides medical care and transportation to hospital emergency rooms and provides field emergency medical support services. There are no EMS facilities or hospitals located within the project study area. The nearest EMS facility is located just west of the central DCIA at 3565 Dorchester Rd.

Health Care Facilities

There are four assisted living facilities within the project study area. These facilities are shown on **Figure 3** and described below:

- Evergreen Residential Care is located at 1818 Norwood Street. This facility has 51 resident beds.
- Palmetto Residential Care of North Charleston is located at 2834 Spruill Avenue. This facility has 12 resident beds.
- Ivory's Loving Care Residential Facility is located at 2827 Spruill Avenue. This facility has 7 resident beds.
- Dorcas Residential Care I is located at 1131 Bexley Street. This facility has 5 beds.

In addition, the Harvest Free Medical Clinic is located just east of the project study area across Hobson Avenue from Sterett Hall at 1670 Drydock Avenue. Harvest Free Medical Clinic is a non-profit Christian organization that provides free medical care and medications to those without resources to pay. The clinic relies almost entirely on a volunteer work force and is funded by individual and corporate donations.

Grocery Stores

There is a notable absence of grocery stores in the project study area. The United States Department of Agriculture (USDA) defines a food desert as a "census tract with a substantial share of residents who live in low-income areas that have low levels of access to a grocery store or healthy, affordable food retail outlet." Three out of the six census tracts in the DSA are USDA designated food deserts. The City of North Charleston's website identifies the locations of convenience store and grocery stores. Within the project study area, there are no grocery stores; the only food markets available are convenience stores located along Spruill Avenue.

7.4. Public Recreational Facilities

Multiple community facilities such as parks, community centers, and recreation centers are located throughout the DCIA and are shown on **Figure 3**. Brief descriptions are provided for each resource.

Parks

Two parks are located in the DCIA. These are:

- Park South – Located near the southern end of the DCIA on Spruill Avenue, this 11-acre park includes a playground, basketball court, green space, park benches and picnic tables. This park received funding in 1982 through the US Department of Interior and National Park Service's Land and Water Conservation Fund and is therefore a Section 6(f) resource. Per the Settlement Agreement (December 2012) between the City of North Charleston and South Carolina Public Railways (SCPR, now Palmetto Railways), the City transferred this property to SCPR to accept title to the property. As of March 2016, Palmetto Railways leases the park to the City of North Charleston.
- Chicora-Cherokee Community Park – This community park includes a 2,300-square-foot playground and is located at 3107 North Carolina Avenue in the central DCIA. The park is adjacent to a community garden and hosts community events such as movie night and community gardening days.

Two additional parks are located adjacent to the northern portion of the DCIA and provide recreational opportunities to residents. These parks are:

- Riverfront Park – Located just outside of the DCIA to the east, this park is set on the banks of the Cooper River. The only access to this park is through the DCIA via McMillan Avenue to Hobson Avenue from the west and south, and via Noisette Boulevard from the north. The park is adjacent to historic homes that once served as officer housing for the Charleston Naval Base. The northern border of the park is Noisette Creek. Amenities within the 24-acre park include a boardwalk, a contemporary performance pavilion, art sculptures, crabbing dock, fenced dog park, fishing pier, fountain, green space, park benches, picnic pavilion, picnic tables, playground, and restrooms. The Greater Charleston Naval Base Memorial is also located in the park. Several large-scale City events are held here throughout the year, including the 4th of July celebration, concerts, and arts festivals.
- North Park Village Park – Located on the south bank of Noisette Creek, west of Spruill Avenue and just west of the DCIA, this 12-acre park includes a playground and passive recreation.

Recreation and Community Centers

Recreation and community centers are an important source of community cohesion in the project study area. One recreation center and two community centers are located in the DCIA. These include:

- Sterett Hall – Located near the center of the DCIA, Sterett Hall serves as both a community center and a recreation center. The facility was part of the Navy base until it was turned over to the City of North Charleston after the base closure in 1996. As of March 2016, the City leased the facility from Palmetto Railways. The lease is expected to expire in June 2016. Recreational



Sterett Hall Recreation Center

amenities include an indoor basketball court; a fitness facility with free weights, machines, and cardio equipment; and saunas. According to the City's Parks and Recreation Department, approximately 75-100 people use the facility on a daily basis with more during special events. Several recreational sports leagues use the facility for practices and games. In addition, a local high school that is currently without a gym is using the facility along with a prep school that is scheduled to use the facility for 38 games and four tournaments this year. The City of North Charleston's Cultural Arts Department manages rental space at Sterett Hall. Facilities available within Sterett Hall include a 960-seat theater style auditorium, a reception hall, studios, rehearsal space, office space, and meeting rooms. A building behind Sterett Hall was used by artists and community groups on an ongoing basis for rehearsal and meeting space.

According to area residents and the City's Parks and Recreation Department, the facility provides a vital recreational resource to the community, especially the youth. The amenities offered at Sterett Hall are not currently available at any other facilities in the project area.

- Live Oak Senior Center – Located at 1920 Reynolds Avenue in the central DCIA, this small senior center offers activities such as sewing.
- Gussie Greene Community Center – This community center is located at 2012 Success Street, near the former Chicora Elementary School building in the Chicora-Cherokee neighborhood. It hosts community meetings and youth programs, and includes the Gussie Green Technology Center, which is a computer lab created through cooperation between the City, LAMC, and Clemson University. A community rain garden, developed through collaboration between the City and EPA, is also located at the community center.
- Gethsemani Community Center – Located to the south of the DCIA at 2449 Beacon Street, this community center serves the Union Heights neighborhood. Amenities include a 2.5-acre public park with a playground, basketball court, and picnic shelter.

7.5. Other Notable Community Resources

The following resources are also located within the DCIA and provide important community services. These resources are shown on **Figure 3**.

- A Federal Law Enforcement Training Center is located in the southernmost portion of the project study area. The center is one of only three residential training sites for federal law enforcement agencies in the United States. The facility opened on October 1, 2004 and also

operates as a federal complex with administrative and operational law enforcement agencies. Federal agencies using the facility include the Department of State, National Oceanic and Atmospheric Administration, US Coast Guard Sector Charleston, Sea Hawk Interagency Operations Center, and US Maritime Administration.

The property consists of a total of over 200 acres, and includes a new five story, 400-bed dormitory that opened in September 2011. The facility can house 767 students on site and the on-center dining facility is capable of serving more than 1,000 students and staff. For FY 2013, the total student throughput was approximately 6,285. The center has near and long-range plans for expansion, including construction of a new shipping and receiving facility in FY 2014 and construction of a new, 9-acre scenario-based training area.

- Metanoia is located adjacent to St. Mathew Baptist Church at 2005 Reynolds Avenue in the Chicora-Cherokee neighborhood in the central DCIA. Metanoia is a non-profit organization focused on investing in neighborhood assets to build leaders, establish quality housing, and generate economic development. The Metanoia organization's initiatives include an after-school program, a youth entrepreneurship and volunteer center, and renovating homes to create home ownership and rental opportunities. They also assisted with development of the Chicora Place Community Garden.
- Lowcountry Orphan Relief, located at 1850 Truxton Avenue in the northern portion of the project study area, provides support services to meet the needs of children identified as at-risk or suffering from abandonment, abuse, and/or neglect. Their facility includes offices and a donation center, and hosts several large events throughout the year. Based on information gathered during public involvement activities, the facility relies on the donations it receives and the many volunteers that come to work at the facility each week. The facility recently added a 5,000 square-foot addition.
- West Yard Lofts is a 60-unit low-income housing complex located off of Noisette Boulevard to the north of Turnbull Avenue, in the northern portion of the River Center site. The complex opened in 2011.
- Lowcountry Innovation Center is located at 1535 Hobby Street in the northern portion of the River Center site. The center offers quality office space at below market rates to meet the needs of knowledge-based companies. The center currently houses more than 20 companies and over 200 employees.
- Chicora Life Center is located at 3600 Rivers Avenue in the former Charleston Navy Hospital. The nearly 400,000-square-foot, 10-story facility is being renovated for an approximate cost of \$30 million dollars by private investors. The purpose of the center is to serve as a social services hub for multiple social, government, and non-profit agencies. The first tenant moved into the facility in April 2015. As of March 2016, tenants in the center include Charleston County Vital Records, Charleston County Coroner's Office, S.C. Department of Alcohol and Other Drugs Abuse Services, S.C. Department of Health and Environmental Control, the Fetter Health Care Network, and Tri-County Intergroup Office with supports Alcoholics Anonymous.

7.6. Pedestrian and Bicycle Facilities

As described in **Section 6.4**, a notably high percentage of households in the DCIA do not have access to a vehicle; therefore, many area residents rely on walking, biking, and transit to reach their destinations.

Overall, the sidewalk system in the project area lacks connectivity and the many gaps in the sidewalk network force pedestrians to either cross the road (if sidewalk is present on the other side) or walk in the right of way or shoulder. The majority of residential streets do not have sidewalks. Where sidewalks are present, they are often in disrepair or not regularly maintained. According to the *Neck Area Master Plan*, potholes, recessed manhole covers, poor repair work, curb damage, overgrown vegetation, and other hazards affect the safety of bicyclists and walkers.

Few bicycle facilities are offered in the DCIA. The only dedicated bike lanes in the DCIA are located along Spruill Avenue. These were added within the past few years. Safety and accessibility for bicyclists represents a challenge in the project area due to the volumes of traffic on the street network, the lack of east-west street connectivity, and the number of at-grade railroad crossings.



Spruill Avenue Bicycle Lane

Improving bicycle and pedestrian safety and accessibility is one of the critical elements of the Neck Area Master Plan. The plan recommends a bicycle and pedestrian network that provides connectivity between residential areas and retail, civic, or employment destinations, access to the water and parks and recreation amenities, and linkages to public transportation stations and corridors. One of the defining projects for the Neck Area Master Plan is development of a north-south spine (focusing on the Spruill Avenue corridor) to improve bicycle and pedestrian connectivity between Charleston and North Charleston. The plan also envisions a series of connections into the spine to better connect the surrounding area.

7.7. Transit, Freight and Airport Facilities

The Charleston Area Regional Transportation Authority (CARTA) operates several bus routes through the project area, as shown on **Figure 3**. Every stop in the DCIA connects to the SuperStop located at the intersection of Rivers Avenue at Cosgrove Avenue (located just outside of the DCIA). The following route information was obtained from the CARTA website (<http://www.ridecarta.com/>) and is listed numerically by route number.

- Route 10 – Rivers Avenue. This route runs along Rivers Avenue to the west of the DCIA. This route operates weekdays with 20 to 30-minute headways, Saturdays with 30-minutes headways, and Sundays with one-hour headways.



Bus stop with shelter at Turnbull Avenue and Manley Avenue

- Route 11 – Dorchester /Airport. This route runs through the DCIA along Spruill Avenue to Dorchester Road. Daily service is provided with one-hour headways.
- Route 13 – Remount Road. This route connects the central DCIA with service along Spruill Avenue, McMillian Avenue, and Rivers Avenue to the North Charleston City Hall located to the north of the DCIA. This route operates Monday through Saturday with one-hour headways.
- Route 32 – North Ridge. This route provides service between the CARTA SuperStop and West Ashley along Cosgrove Avenue, Sam Rittenberg Boulevard, Orleans Road, Ashley River Road and Bees Ferry Road. Daily service is provided with approximate one-hour headways except on Sunday, which has approximate two-hour headways.
- Route 102 – North Neck. This route provides service between the CARTA SuperStop and downtown Charleston along Spruill Avenue, Rivers Avenue and King Street. Service is provided Monday through Saturday with one-hour headways.
- Route 103 – Leeds Avenue. This route has a short connection along Spruill Avenue in the central DCIA. Service is provided Monday through Saturday with one-hour headways.
- Route 104 – Montague Avenue. This route runs along Spruill Avenue in the central DCIA and continues north to Montague Avenue. Service is provided Monday through Saturday with one-hour headways.

There are bus stops, some with bus shelters, located throughout the DCIA. Several people were observed waiting at various bus stops during the site visit.

Amtrak operates three interstate passenger rail trains per day each way near the project area. Stops for the Silver Meteor and Palmetto lines are made at the Amtrak station in North Charleston near the Rivers Avenue/Gaynor Street intersection, located northwest of the DCIA. The Silver Star line also passes through the area but does not stop.

Freight facilities in around the DCIA include port and rail facilities. Port facilities are located immediately east and south of the DCIA. Veterans Terminal is located on 110 acres adjacent to the southern end of the DCIA, south of Viaduct Road. A new marine container terminal is currently under construction just south of the DCIA with the first phase anticipated to open in 2019. CSX and Norfolk Southern both operate rail lines in the project area. CSX and Norfolk Southern both have rail yards located in North Charleston. The CSX Bennett Rail Yard is located north of Dorchester Road between I-526 and I-26, approximately two miles west-northwest of the project area. The Norfolk Southern Seven Mile Rail Yard is located just east of I-26 on the south side of Montague Avenue. In addition, CSX's Cooper Yard is located south of the DCIA on the east side of Spruill Avenue, adjacent to the Union Heights neighborhood.

No airport facilities are located within the DCIA. The nearest airport, Charleston International Airport, is located approximately 2.5 miles northwest of the DCIA.

8. Community Cohesion

Community cohesion is generally strong within neighborhoods in the project area. Community centers within the neighborhoods act as centers of community cohesion, serving as the location for neighborhood meetings, after school programs, summer camps, and recreational activities. In addition, the neighborhoods in the project area have learned to work together to voice their concerns about environmental issues that affect them. For example, they worked together for years to push for the closure and demolition of a Charleston County trash incinerator off Spruill Avenue that was finally

demolished in 2010. Also, several of the neighborhoods joined together to form the Lowcountry Alliance for Model Communities to represent the interests of the community in developing a mitigation plan for the proposed port expansion project (additional discussion provided below in **Section 8.1**).

In addition to neighborhood community centers, Sterett Hall and the Chicora-Cherokee Community Garden and park also serve as centers for community cohesion. As discussed in **Section 7.4**, Sterett Hall is an important recreational and arts resource for the community. The Chicora-Cherokee Community Garden hosts community gardening days, movie nights, and other social events.

The following sections describe community organizations that are active in the area, previous mitigation agreements, and community concerns noted through public involvement activities.

8.1. Community and Neighborhood Organizations

Community and neighborhood organizations are important sources of community cohesion in the project area. The following are descriptions of these organizations:

Metanoia

Metanoia is a non-profit organization focused on investing in neighborhood assets to build leaders, establish quality housing, and generate economic development. It is located adjacent to St. Mathew Baptist Church on Reynolds Avenue in the Chicora-Cherokee neighborhood in the central DCIA. Since it began in 2002, Metanoia has been a positive force in the neighborhood. The organization's initiatives include an after-school program, a youth entrepreneurship and volunteer center (opened on Reynolds Street in May 2014), and renovating homes to create home ownership and rental opportunities. According to their website, 57 homes have been built or renovated by Metanoia in the community, leading to positive economic impacts and a reduction in crime. They also assisted with development of the Chicora Place Community Garden, which produces fresh fruits and vegetables for the community.

Metanoia has been very involved in community meetings regarding this and other projects in the area. Youth from Metanoia's Freedom School, along with their parents and community members, marched to Sterett Hall to raise awareness and the proposed intermodal facility and its potential impacts. Metanoia is very concerned about potential impacts to the community and how the project may impact the positive changes and investments that have been made in the area.

Lowcountry Alliance for Model Communities

In 2005, seven African-American neighborhoods in the project area (Accabee, Chicora/Cherokee, Five Mile, Howard Heights, Liberty Hill, Union Heights, and Windsor) agreed to form the Lowcountry Alliance for Model Communities (LAMC) to bring their concerns about the proposed port expansion to the SC State Ports Authority. In response to the draft environmental impact statement for the marine container terminal on the former Navy base adjacent to the LAMC neighborhoods, LAMC conducted an environmental review and found that the neighborhoods met the Environmental Justice criteria and would bear a disproportionate amount of impacts as a result of the project. They worked with the SC State Ports Authority and the City of North Charleston to develop a Community Mitigation Plan, as described in greater detail in **Section 8.2**. The group also addresses community concerns such as affordable housing, zoning, and social issues (e.g., crime, teen pregnancy, and drug addiction) and remains active in the community today.

As one component of the Community Mitigation Plan, the *LAMC Area Revitalization Plan* (2010) was developed to present a vision for the future of the LAMC area and set a clear action plan that turns conceptual projects into reality. The planning area includes the entire DCIA south of Cosgrove Avenue. Within and adjacent to the DCIA, the following redevelopment areas are identified in the plan:

- **Stromboli Avenue Corridor Development** – Stromboli Avenue is currently an industrial corridor that divides the residential areas in Chicora/Cherokee to the north from Windsor and Union Heights to the south. This area is targeted for improvements extending west to Carner Avenue and east to Spruill Avenue. Key elements of the redevelopment plan include continuing the existing street grid to improve connectivity between neighborhoods to the north and south; transforming Stromboli Avenue into a wide boulevard lined with mixed-use development; institutional and office uses at the intersections of Carner Avenue and Stromboli Avenue, including a maritime and transportation job training center; retail uses at the intersection of Spruill Avenue and Stromboli Avenue; open space and a community park with a recreational center; and single-family residential development both north and south of the corridor.
- **Chicora Tank Farm Concept** – This site is located just north of Clement Avenue, west of Chicora Avenue and includes a 22.5-acre former ship fuel storage site adjacent to the Military Magnet School. The redevelopment concept proposes open space and recreation, including a running track, football field, two baseball diamonds, three junior-sized soccer fields, and several basketball and tennis courts.

Regarding development of an intermodal facility in the area, the plan states:

“Locating an intermodal rail yard in North Charleston would worsen existing congestion problems caused by rail traffic and train switching, and would virtually undo all efforts made to date to transform the City’s reputation of industrial blight to one of renaissance. Based upon information drawn from studies completed to date, and in consideration of the potentially harmful direct and indirect impacts caused by increased industrial railroad activity, it is in the best interest of LAMC to oppose any proposals for the location of an intermodal rail terminal within the LAMC study area.”

LAMC has formed a community-university partnership with the University of South Carolina and the University of Maryland – College Park to study and address Environmental Justice, public health, and revitalization issues in North Charleston. The partnership has been awarded grants for programs such as summer enrichment programs, research, and environmental monitoring and pollutant assessment.

LAMC and the Charleston Community Research to Action Board (CCRAB) worked with EPA to develop the EJ Radar online mapping tool (www.ejradar.org), which allows residents to view pollutant levels at various locations throughout the community and document community observations and concerns. CCRAB was recently awarded a grant to train residents to use the online mapping tool.

Neighborhood Organizations

Neighborhood organizations are important components of the community within and surrounding the DCIA. Neighborhood organizations in the area generally meet monthly to discuss issues within their respective neighborhoods (e.g., crime, code enforcement, proposed rezoning, etc.), receive updates on community initiatives, and plan community events. As described in **Section 5**, the project team met with several neighborhood organizations to gather information about community concerns for this report.

8.2. Previous Litigation, Settlement Agreement, and Community Mitigation Plan

Following the closure of the CNC in 1996, the SCSPA was granted the southern portion of the property (approximately 350 acres) and the northern end of the property was deeded to the City of North Charleston for redevelopment. Over the past decade, there have been disagreements and lawsuits over

how the land on the former base should be divided and used. The following sections give a brief overview of previous disputes involving the project area and how they were resolved.

Previous Litigation and Settlement Agreement

In 2002, a Memorandum of Understanding and Agreement (MOUA) was signed by the SCSPA and the City whereby the City would develop the northern portion of the former CNC site and SCSPA would develop the southern portion of the site. The MOUA specified certain minimum infrastructure that must be in place before the SCSPA commences container operations. The MOUA further acknowledged the City's objection to rail access from the north and specified that SCSPA will use rail access exclusively from the south end of the former CNC property.

In 2011, the City of North Charleston filed several legal challenges against the SC Department of Commerce, Division of Public Railways related to condemnation actions initiated by Public Railways for the proposed ICTF.

In December 2012, a settlement agreement was signed by the South Carolina Department of Commerce, Division of Public Railways and the City of North Charleston to resolve all disputes among them that were the subject of various legal actions and move forward with a plan to construct the ICTF while taking steps to minimize existing and anticipated issues with the transportation infrastructure in and around North Charleston. The financial terms of the settlement included Public Railways paying \$8 million to the City as mitigation for rail access impacts and Public Railways assuming \$6.5 million in outstanding Tax Increment Financing (TIF) obligations from the City. The settlement also included transfers of real property from Public Railways to the City, and vice-versa. Other terms of the settlement included the following:

- The City agreed to support all reasonable rezoning, permitting, and other approvals necessary for implementation of the ICTF.
- The City and Public Railways, along with SCDOT and the SC State Ports Authority, will equally fund a comprehensive surface transportation study to identify impacts of rail and highway traffic related to state port and rail operations throughout North Charleston, including identification of optimal truck routes to and from the ICTF.
- The parties agreed to work together with the Class I rail carriers to implement quiet zones and other related measure to mitigate adverse impacts of the ICTF.
- The City agreed to withdraw its objections to the condemnation actions initiated by Public Railways for the ICTF.
- The City agreed to withdraw any objection to northern rail access for the ICTF.

A copy of the settlement agreement is included in **Appendix C**.

Community Mitigation Plan

In 2006, the Corps released the *Final EIS Proposed Marine Container Terminal at the Charleston Naval Complex*. As part of the mitigation plan for the Final EIS, and in response to impacts to Environmental Justice communities associated with the marine container terminal, the SC State Ports Authority, LAMC, and the City of North Charleston identified eight community mitigation activities along with funding targeted to address the direct and indirect impacts of the marine terminal. The result was a \$4.08 million Community Mitigation Plan that was the first of its kind in the state and the nation. The following activities and funding levels were identified in the Community Mitigation Plan:

- Establish a housing trust (\$1,000,000)
- Placement and monitoring of environmental receptors in the community (\$100,000)

- Support for education attainment programs (\$250,000)
- Establish a Maritime Training Institute (career center) (\$600,000)
- Establish and support local vendor assistance programs (\$350,000)
- Expand health care and fitness amenities (\$500,000)
- Improve existing community centers (\$300,000)
- Develop a community vision and master plan (\$300,000)
- Inflation/Contingency (\$680,000)

A Mitigation Agreement Commission (MAC) was created to implement the Community Mitigation Plan. To date, only three of the activities in the Community Mitigation Plan have been completed. First, as discussed above, the community master plan has been developed (*LAMC Area Revitalization Plan*) and an affordable housing plan was also developed. Second, air quality monitors have been placed in the community and are being monitored. Finally, a \$250,000 scholarship fund was created. The MAC issued a Request for Qualifications for a feasibility study for the Maritime Training Institute in the summer of 2013 and a consultant was selected to prepare the feasibility study, but the contract has yet to be signed.

8.3. Community Concerns

Based on data collected from meetings with local planning staff, neighborhood groups, and public involvement events conducted to date for the proposed ICTF, there is a high level of concern from neighborhoods and businesses in the project area regarding potential impacts of the proposed project. In addition, the proposed project is not consistent with past planning efforts, specifically the Noisette Master Plan which called for higher densities of mixed use development on the River Center site and institutional uses on the Clemson site, and the Neck Area Master Plan that envisioned research and development uses on the proposed project site.

Residents, business owners, and neighborhood associations have concerns about how the project will impact their properties and communities, especially in terms of truck and rail traffic, noise, light, air pollution, and visual impacts. City leaders and community advocates have concerns about how the alternatives may impact ongoing revitalization and economic development efforts in the area. Specific concerns noted in meeting minutes from public involvement activities conducted to date include the following:

- Residents and business owners, especially in the River Center Site, voiced concerns about the potential for future rezoning of property and incompatible land uses being located adjacent to them.
- Concerns about access to properties, particularly along St. John's Avenue.
- Concerns about flooding; existing flooding issues were noted.
- Concerns about possible loss of customer base to local businesses.
- Concerns about traffic flow and the interaction of trains, trucks, and cars on the local roadway network, and the related effect to emergency vehicle services and access.
- Concerns about existing pollution in the area and the potential for air, noise and light pollution as a result of the project.
- Residents noted existing issues with trains being parked across intersections for long periods, and concerns that delays will get worse with the project.

- Train noise (including horns) and vibration are already issues in parts of the Park Circle area and Hunley Waters neighborhood where residents are concerned this will get worse with the project.
- Concerns about hazardous materials on trains; one resident noted that there was a chemical explosion in the Rosemont neighborhood in the 1990's.
- Request for a health risk assessment.
- The loss of the community facility in Sterett Hall and local ball fields nearby was raised as a major concern by local residents and neighborhood advocates.
- Representative for West Yard Lofts (low-income housing) was concerned about maintaining traffic flow to this property and efficient access for emergency vehicles; noise and light impacts are also a major concern.
- The owner of Pierside Boatworks (located near the Clemson University Research Institute) is concerned that trucks will stack up along Hobson Avenue waiting to get into the ICTF and will block access to his business. He would like trucks to travel under Viaduct Road and stay off Hobson Road.
- Concerns about impacts to Chicora-Cherokee Community Garden and Park
- Concerns about loss of access to Riverfront Park
- Concerns about the project thwarting ongoing redevelopment efforts.

The public will continue to have opportunities to provide input through additional public meetings, the project website, and a public hearing that will be conducted as part of the project development process.

9. Community Impacts

As previously described in **Section 1** of this document, seven action alternatives were recommended for detailed study in the DEIS, along with a No Action Alternative. The potential community impacts from these alternatives are described in the following sections. Potential impacts discussed in this section include both temporary construction impacts, such as detours, noise and air quality impacts, and permanent impacts, such as right-of-way impacts, operational noise, and changes in access.

9.1. Physical Impacts

Potential physical impacts associated with the construction and operation of the proposed ICTF include right-of-way acquisition, noise, vibration, and air quality impacts. For all alternatives, temporary noise and air quality impacts during construction would likely have direct, short-term adverse impacts on the surrounding community, especially homes and businesses nearest to the project site. The intensity of impacts will be determined based on the outcome of noise and air quality analyses. Minimization and mitigation measures will be addressed as outlined in the noise and air quality technical memorandum.

Physical impacts associated with each of the project alternatives are discussed below.

No Action Alternative

The No Action Alternative would still involve the construction of rail-served warehousing and mixed-use development on the Proposed Project and River Center sites. Potential physical impacts of the rail-served warehousing would likely include noise, vibration, and air quality impacts, but to a lesser extent than is expected under the build alternatives. The No Action Alternative may also lead to the acquisition or termination of existing leases for businesses, non-profit organizations, and residential properties in the River Center site, depending upon the timing and location of industrial and mixed-use development.

Barriers to the Elderly and Handicapped

The Americans with Disabilities Act (ADA) of 1990 (PL 110-325) provides for equal opportunity for individuals with disabilities to access public and private facilities. Construction of rail served warehousing and mixed-use development would be built in compliance with ADA requirements. Therefore, the No Action Alternative would not result in physical impacts in terms of new barriers to the elderly and handicapped.

Alternative 1: Applicant's Proposed Project (CSX – Southern to Milford / NS – Hospital District)

Physical impacts associated with Alternative 1 include new rail tracks to the north and south of the Proposed Project site, new at-grade rail crossings, and construction of an earthen berm and sound wall along the western boundary of the project site.

New rail track to the north of the Proposed Project site for the northern rail connection is proposed through the River Center Neighborhood. This will lead to additional noise, vibration, and visual impacts since the lead tracks would be located adjacent to an office building currently used by the Department of Defense, residences (currently leased from Palmetto Railways) and Lowcountry Orphan Relief. There is also potential that Palmetto Railways would terminate leases in the area and acquire parcels they do not own (including Lowcountry Orphan Relief) if access would not be provided to these properties. No new at-grade crossings are included with the northern rail connection under Alternative 1.

New rail track to the south of the Proposed Project site for the southern rail connection will require additional ROW from industrial properties just north of Milford Street and creates one major at-grade rail crossing at Meeting Street. Train horn noise at this new at-grade crossings would directly impact residences and businesses in the Union Heights Neighborhood directly north of this area. Overall intensity of noise and vibration impacts will be determined in the noise and vibration analysis.

The 24-hour-per-day operation of the Proposed Project would have notable, long-term, adverse physical impacts, including noise and visual impacts, on the Chicora-Cherokee neighborhood located directly to the west of the Proposed Project. Noise would be generated by trains pulling into and out of the facility, cranes moving and stacking containers, and trucks carrying containers into and out of the facility. The intensity of these noise impacts on the neighborhood will be determined in the noise analysis. The construction of an earthen berm and noise wall along the western boundary of the project would attenuate some of the noise, but would have long-term, adverse aesthetic impacts to the Chicora-Cherokee neighborhood from the removal of residential structures. Visual impacts would also be caused by the operation of high mast lights (85 feet high) that would operate from dusk until dawn, seven days a week. Providing additional buffers and landscaping adjacent to the neighborhood may help to minimize impacts.

The neighborhoods surrounding the Proposed Project have voiced concerns about air quality impacts from the operation of the ICTF, including emissions from cranes, trucks, and train engines. The intensity of air quality impacts on the neighborhoods will be determined in the air quality analysis.

Relocations

Construction of the earthen berm and sound wall along the western boundary of the project site will result in the relocation of 106 residences and 5 businesses from the Chicora-Cherokee neighborhood. Any person(s) whose property needs to be acquired for the Proposed Project will be compensated according to the U.S. Constitution and the Uniform Act of 1970, as amended.

Barriers to the Elderly and Handicapped

The Proposed Project site is located on flat, level terrain that would not create barriers to access for the elderly or handicapped. Facility buildings would be built in compliance with ADA requirements. Designated ADA compliant parking spaces would be provided to assure the availability of parking and decrease the distance for elderly and disabled visitors to facility buildings. Therefore the project would not result in significant impacts in terms of new barriers to the elderly and handicapped.

Alternative 2: Proposed Project Site (CSX – Southern to Milford / NS – S-Line)

Alternative 2 is the same as Alternative 1 with the following exception: the northern rail connection for NS would be relocated along Spruill Avenue within existing CSX ROW to the S-line, and turn east along Aragon Avenue to the existing NCTC rail line. The proposed new rail track around the Spruill Avenue/Aragon Avenue/Bexley Street intersection would directly impact commercial properties (Reddy Ice, Z-Bar, and some vacant properties) in the southwest quadrant of the Spruill Avenue/Aragon Avenue/Bexley Street intersection. Residential homes along Bexley Street would be directly impacted by long-term noise and vibration impacts as a result of trains operating along a new rail track just south of Bexley Street. Similarly, properties between Spruill Avenue and St. John's Avenue, including residential homes and St. John's Catholic Church and School, would be directly impacted by long-term noise and vibration impacts from trains operating along a new rail track on the east side of Spruill Avenue. Overall intensity of noise and vibration impacts will be determined in the noise and vibration analysis.

Relocations

Relocations under Alternative 2 are the same as Alternative 1.

Barriers to the Elderly and Handicapped

Similar to Alternative 1, Alternative 2 would not result in significant impacts in terms of new barriers to the elderly and handicapped.

Alternative 3: Proposed Project Site (CSX – Southern to Kingsworth / NS – Hospital District)

Alternative 3 is the same as Alternative 1 with the following exception: the southern rail connection for CSX would connect to an existing CSX rail line near Kingsworth Avenue (and adjacent to existing NS rail and ROW). Construction of the rail and ROW improvements under Alternative 3 would result in an at-grade crossing of Spruill Avenue and Meeting Street, west of Cooper Yard. This new track and at-grade rail crossing would directly impact the Union Heights Neighborhood from ROW acquisition and residential relocations. The southern portion of the neighborhood would also be directly impacted by long-term noise and vibration impacts from operating along the new rail track. Overall intensity of noise and vibration impacts will be determined in the noise and vibration analysis.

Relocations

Alternative 3 includes all of the relocations identified for Alternative 1, plus an additional 8 residential relocations on the block between Kingsworth Avenue and Little Avenue, for a total of 114 residential relocations.

Barriers to the Elderly and Handicapped

Similar to Alternative 1, Alternative 3 would not result in significant impacts in terms of new barriers to the elderly and handicapped.

Alternative 4: Proposed Project Site (CSX & NS – Southern to Milford)

Alternative 4 is the same as Alternative 2 with the following exception that a second track would need to be constructed for NS, which would then tie into the existing NS rail lines. To the north of the intermodal facility, a rail spur or “tail track”, is proposed to extend from the facility through the River Center Neighborhood, as is identified for Alternative 1, but would stop short of Noisette Creek.

Relocations

Alternative 4 includes all of the relocations identified for Alternative 1.

Barriers to the Elderly and Handicapped

Similar to Alternative 1, Alternative 4 would not result in significant impacts in terms of new barriers to the elderly and handicapped.

Alternative 5: River Center Site (CSX – Southern to Milford / NS-Hospital District)

The River Center site alternative would consist of approximately 113 acres for the ICTF and associated off-site road and rail improvements. The intermodal facility would include all of the facility components of the Proposed Project, with the exception that a sound attenuation and security wall would be constructed adjacent to Noisette Boulevard along the length of the eastern boundary of the facility site.

Alternative 5 would result in noise, vibration, and visual impacts to businesses located on the east side of Noisette Boulevard adjacent to the ICTF, including the Berkeley-Charleston-Dorchester Council of Governments and 10 Storehouse Row. The noise wall proposed along the eastern boundary of the ICTF adjacent to Noisette Boulevard and may lessen some of these impacts. Overall intensity of noise and vibration impacts will be determined in the noise and vibration analysis.

Alternative 5 would require acquisition of residential and commercial properties, including the West Yard Lofts low-income housing complex and the Lowcountry Innovation Center, which houses more than 15 companies. The relocation of these businesses and low-income residents would have major short-term, localized direct adverse impacts. The owner of West Yard Lofts is under contract to provide low-income housing and is concerned about violating their contract if they are forced to relocate. Impacts may be minimized by providing relocation assistance and working with business owners and residents to find replacement facilities.

This alternative would also lead to the termination of existing leases with businesses on the west side of Noisette Boulevard on the River Center site, including Department of Defense offices, a furniture store, and a large marine container manufacturer. This alternative may also require the termination of leases

for local non-profit organizations and residential properties located on the western portion of the River Center site, depending upon the final design. This short-term, localized, direct adverse impact could be minimized by providing adequate notice to lessees and providing assistance with finding alternate locations. Overall intensity of impacts is anticipated to be minor.

Alternative 5 would include the extension of tail tracks and a drayage road adjacent to the Chicora-Cherokee neighborhood between Reynolds Avenue and Viaduct Road. This would expose the neighborhood to noise and vibration impacts from trains on the tail tracks as well as noise and air quality impacts from diesel trucks on the drayage road. These direct, long-term impacts would occur 24 hours per day. It should be noted that due to a longer drayage road between the ICTF and the port, Alternative 5 would require twice as many trucks traveling on the drayage road to transport the same volume of containers as Alternative 1. To minimize impacts to the neighborhood, consideration should be given to moving the tail tracks and drayage road to the east to allow for a buffer adjacent to the neighborhood as well as a noise wall.

Relocations

Construction of the River Center site will result in the relocation of 62 residences and 18 businesses from the River Center neighborhood. Any person(s) whose property needs to be acquired for the Proposed Project will be compensated according to the U.S. Constitution and the Uniform Act of 1970, as amended.

Barriers to the Elderly and Handicapped

Similar to Alternative 1, Alternative 5 would not result in significant impacts in terms of new barriers to the elderly and handicapped.

Alternative 6: River Center Site (CSX – Southern to Kingsworth / NS-Hospital District)

Alternative 6 is the same as Alternative 5 with the following exception that the southern rail connection for CSX would connect to an existing CSX rail line near Kingsworth Avenue (and adjacent to existing NS rail and ROW). Construction of the rail and ROW improvements under Alternative 6 would result in a new at-grade crossing at Spruill Avenue and Meeting Street. This new track and at-grade rail crossing would directly impact the Union Heights Neighborhood from ROW acquisition and residential relocations. The southern portion of the neighborhood would also be directly impacted by long-term noise and vibration impacts from operating along the new rail track. Overall intensity of noise and vibration impacts will be determined in the noise and vibration analysis.

Relocations

Alternative 6 includes all of the relocations identified for Alternative 5, plus an additional 8 residential relocations on the block between Kingsworth Avenue and Little Avenue, for a total of 70 residential relocations.

Barriers to the Elderly and Handicapped

Similar to Alternative 1, Alternative 6 would not result in significant impacts in terms of new barriers to the elderly and handicapped.

Alternative 7: River Center Site (CSX & NS Southern to Milford)

Alternative 7 is the same as Alternative 5 with the exception that NS would also enter and exit the River Center site from a southern rail connection.

Relocations

Relocations under Alternative 7 are the same as Alternative 5.

Barriers to the Elderly and Handicapped

Similar to Alternative 1, Alternative 7 would not result in significant impacts in terms of new barriers to the elderly and handicapped.

Related Activities

If the Proposed Project is constructed, a section of unimproved CSX ROW would have to be activated with rail lines that would accept intermodal trains at the proposed new at-grade crossing at Meeting Street in the vicinity of Herbert Street. This Related Activity would apply to Alternatives 1, 2, 4, 5, and 7.

Under Alternatives 3 and 6, the Related Activity construction would begin at the proposed new at-grade crossing at Meeting Street in the vicinity of Kingsworth Avenue.

Alternative 2 requires the reactivation of an out-of-service ROW and construction of a new railroad bridge to connect the NS lead track from the ICTF across a portion of marsh which drains to Noisette Creek to the existing NCTC track along Virginia Avenue.

Related activities will result in direct impacts to adjacent properties from long-term noise and vibration impacts from operating on the new and re-activated rail tracks. Overall intensity of noise and vibration impacts will be determined in the noise and vibration analysis.

9.2. Community Resource, Cohesion and Stability Impacts

As described in **Section 8**, community cohesion is generally strong within neighborhoods in the project area. All of the alternatives would impact an important community resource (Sterett Hall) and are inconsistent with the vision that community residents have for the area, as described below. All of the action alternatives will result in the displacement of residential properties.

No Action Alternative

The No Action Alternative would involve the construction of rail-served warehousing and mixed-use development on the Proposed Project and River Center sites. Community resources that would be displaced with or without the Proposed Project, include Sterett Hall (a community recreation center) and two buildings used by the North Charleston Arts Department (recently closed). As described in **Section 7.4**, Sterett Hall is an important community resource that offers recreational opportunities, an auditorium, and meeting space not available elsewhere in the community. In addition, the City's Cultural Arts Department used two buildings adjacent to Sterett Hall for classrooms, artist studios, rehearsal space, and summer camps. The City is currently leasing Sterett Hall from Palmetto Railways with an anticipated lease expiration date of June 2016. Removal of these resources would have long-term, direct impacts to the neighborhoods surrounding the project site due to the loss of a community gathering space and individual and organized recreational and arts opportunities.

Opportunities for replacement of the programs and services provided at Sterett Hall may exist in the Chicora Life Center at the corner of McMillan Avenue and Spruill Avenue, which is planned to include a recreational facility. Per the 2012 Settlement Agreement between South Carolina Public Railways (SCPR) and the City of North Charleston, which includes the transfer of the Proposed Project site (including Sterett Hall) from the City to SCPR, by 2016 SCPR will have paid a total of \$8 million to the City as mitigation for rail access impacts and SCPR will assume \$6.5 million in outstanding Tax Increment Financing (TIF) obligations from the City. With mitigation, overall intensity of impacts is anticipated to be minor. However, if no replacement is provided for services and programs currently located at Sterett Hall, the impact to the community is anticipated to be major.

Alternative 1: Applicant's Proposed Project (CSX – Southern to Milford / NS – Hospital District)

The proposed project is not consistent with the City's vision (i.e., the Noisette Master Plan) for a mixed-use new urban community on the northern portion of the former Navy base. The concept of an industrial intermodal rail facility is not what the community has been expecting based on local plans. The proposed project may indirectly impact the stability of new businesses and residential developments that were developed in the area under the impression that they would be part of a mixed-use new urban community. At public meetings and neighborhood meetings, the community has voiced concerns that the project may reverse the positive investments and changes that have been made in the area in recent years. This minor to moderate impact may be lessened by working with the community to implement other community revitalization efforts, such as the revitalization of the Reynolds Avenue corridor (currently being studied by Metanoia) or the Stromboli Avenue corridor (included in the LAMC Area Revitalization Plan).

The construction of an earthen berm and noise wall along the western boundary of the Proposed Project site will result in the relocation of 106 residential units from the Chicora-Cherokee neighborhood. The loss of this housing represents approximately 6 percent of the housing units in the neighborhood. Ninety-six of the 106 residential units are renter occupied. Available housing is not available in the Chicora-Cherokee Neighborhood for all of the relocatees to stay within the neighborhood. This potentially major impact to community cohesion will be offset by phasing relocations for renters to other rental properties as they become available in nearby or adjacent neighborhoods.

The loss of Sterett Hall under the No-Action Alternative would result with or without Alternative 1 and is not considered an impact by the alternative.

Alternative 2: Proposed Project Site (CSX – Southern to Milford / NS – S-Line)

Community cohesion and stability impacts associated with Alternative 2 are the same as the impacts associated with Alternative 1.

Alternative 3: Proposed Project Site (CSX – Southern to Kingsworth / NS – Hospital District)

Community cohesion and stability impacts associated with Alternative 2 are the same as the impacts associated with Alternative 1. In addition, 8 residential units would be displaced in the Union Heights Neighborhood for new rail tracks. This loss of these 8 residential units represents 1 percent of the housing units in the neighborhood and would be considered a minor impact to community cohesion since the units are currently separated from neighborhood by the existing access ramps from Spruill Avenue to I-26.

Alternative 4: Proposed Project Site (CSX & NS – Southern to Milford)

Community cohesion and stability impacts associated with Alternative 4 are the same as the impacts associated with Alternative 1.

Alternative 5: River Center Site (CSX – Southern to Milford / NS-Hospital District)

Alternative 5 would impact community resources on the River Center site, including West Yard Lofts and the Lowcountry Innovation Center. West Yard Lofts is a new (opened 2011) low-income housing complex, which includes 60 units. The relocation of these low-income residents would have major short-term, localized direct adverse impacts. The owner of West Yard Lofts is under contract to provide low-income housing and is concerned about violating their contract if they are forced to relocate. They are also concerned about the impacts of the displacement on the residents. Impacts may be minimized by providing relocation assistance and working with the owner and residents to find replacement facilities. Impacts to Lowcountry Innovation Center are discussed below under Economic and Business Resource Impacts.

Lowcountry Orphan Relief is also located near the River Center site, but is not directly impacted by the project footprint as currently designed. Lowcountry Orphan Relief includes a donation center and is heavily reliant on volunteers. It also hosts several large outdoor events each year. This facility would be directly impacted if they lose easy access for donors and volunteers, or if outdoor events are affected by the presence of the ICTF.

As with Alternative 1, this alternative is not consistent with the City's vision (i.e., the Noisette Master Plan) for a mixed-use new urban community on the northern portion of the former Navy base.

The loss of Sterett Hall under the No-Action Alternative would result with or without the Alternative 5 and is not considered an impact by the alternative.

Alternative 6: River Center Site (CSX – Southern to Kingsworth / NS-Hospital District)

Community cohesion and stability impacts associated with Alternative 5 are the same as the impacts associated with Alternative 6. In addition, 8 residential units would be displaced in the Union Heights Neighborhood for new rail tracks. This loss of these 8 residential units represents 1 percent of the housing units in the neighborhood and would be considered a minor impact to community cohesion since the units are currently separated from neighborhood by the existing access ramps from Spruill Avenue to I-26.

Alternative 7: River Center Site (CSX & NS Southern to Milford)

Community cohesion and stability impacts associated with Alternative 7 are the same as the impacts associated with Alternative 5.

Related Activities

Direct impacts to community cohesion and stability are not anticipated from the project Related Activities.

9.3. Economic and Business Resource Impacts

All alternatives would provide indirect, long-term economic benefits to the region and local community as employment opportunities are directly and indirectly created as a result of the project. Palmetto Railways estimates that the ICTF would employ approximately 180 people by 2018 and 435 people by 2038. Working with the community to develop job training centers, scholarship programs, and career fairs would help to ensure that some of these economic benefits remain in the local community surrounding the project. There may be opportunities for coordination with the Maritime Training Center being planned by the Mitigation Agreement Commission as part of the Community Mitigation Plan for the marine container terminal.

Direct impacts to businesses under each alternative are discussed in **Section 9.1**. Other economic and business resource impacts for each alternative are discussed below.

No Action Alternative

The rail-served warehousing and mixed-use development that is anticipated under the No Action Alternative would likely have many of the same beneficial and adverse economic impacts as discussed for the other alternatives; however, these impacts are anticipated to be at a lesser scale than with the other alternatives.

Alternative 1: Applicant's Proposed Project (CSX – Southern to Milford / NS – Hospital District)

For the Proposed Project, the main gate for trucks and employees would be located off of Hobson Avenue, to the north of Supply Street. If trucks are queuing along Hobson Avenue and blocking access to Supply Street, this would have an indirect adverse impact on businesses along the water that are accessed via Supply Street, including Pierside Boatworks, the H.L. Hunley Confederate Submarine (museum and tourist site), and the Clemson University Restoration Institute. This was a concern noted by business owners in the area during public meetings.

The Proposed Project has the potential for long-term indirect impacts to businesses near the project site if noise or aesthetic impacts cause a loss of customers. For example, the owner of a special events facility on the east side of North Carolina Avenue in the Chicora-Cherokee neighborhood is concerned that people will not want to rent his facility if there are noise impacts from trains and visual impacts from cranes and containers. Similarly, the owner of a software company on North Carolina Avenue at Success Street expressed reservations about investing in additional improvements to his property since the Proposed Project would operate only a few hundred feet away. Proposed mitigation for noise and aesthetic impacts will be identified in separate technical memorandums would help to minimize these business impacts.

The northern rail connection through the River Center Neighborhood has potential to impact businesses including Lowcountry Orphan Relief and an office building currently being used by the Department of Defense. Coordination with business owners in the River Center Neighborhood and providing assistance to any displaced businesses with finding replacement locations would help to minimize impacts.

The southern rail connection will require ROW acquisition for a southern rail connection through existing industrial properties just north of Milford Street. The majority of the properties are vacant or storage lots. Businesses that could be displaced include Fraziers Ironworks, Peeples Heating and Air Conditioning, and Applied Building Sciences Inc.

Alternative 2: Proposed Project Site (CSX – Southern to Milford / NS – S-Line)

Economic and business resource impacts under Alternative 2 are the same as Alternative 1, plus potential impacts to commercial properties around the Spruill Avenue/Aragon Avenue/Bexley Street intersection that include Reddy Ice, Z-Bar, and vacant properties.

Alternative 3: Proposed Project Site (CSX – Southern to Kingsworth / NS – Hospital District)

Economic and business resource impacts under Alternative 3 are the same as Alternative 1, except the businesses north of Milford Street for the southern rail connection would be avoided.

Alternative 4: Proposed Project Site (CSX & NS – Southern to Milford)

Economic and business resource impacts under Alternative 4 are the same as Alternative 1.

Alternative 5: River Center Site (CSX – Southern to Milford / NS-Hospital District)

Alternative 5 would directly impact several businesses, including the Lowcountry Innovation Center (housing 15 or more companies), a large marine container manufacturing facility, a furniture store, and an office building currently used by the Department of Defense.

For Alternative 5, the main gate for trucks coming from I-26 would be located on an extension of Cosgrove Avenue. The number of trucks projected on Cosgrove Avenue to access the ICTF on the River Center site will be evaluated in the traffic analysis for this project. This volume of trucks would have a notable long-term indirect adverse impact on businesses located along Cosgrove Avenue, including small shops and offices, a hair salon, a bank, and the Charleston County Department of Social Services. Customers may have a difficult time accessing these businesses, and may be deterred from patronizing these businesses, if there are heavy volumes of trucks along the road.

Alternative 5 also has the potential for long-term indirect impacts to businesses on the east side of Noisette Boulevard adjacent to the River Center site, including offices and a restaurant, if noise or aesthetic impacts cause a loss of customers or disrupt office workers.

The southern rail connection will require ROW acquisition for a southern rail connection through existing industrial properties just north of Milford Street. The majority of the properties are vacant or storage lots. Businesses that could be displaced include Fraziers Ironworks, Peeples Heating and Air Conditioning, and Applied Building Sciences Inc.

Alternative 6: River Center Site (CSX – Southern to Kingsworth / NS-Hospital District)

Economic and business resource impacts under Alternative 6 are the same as Alternative 5, except the businesses north of Milford Street for the southern rail connection would be avoided.

Alternative 7: River Center Site (CSX & NS Southern to Milford)

Economic and business resource impacts under Alternative 7 are the same as Alternative 5.

Related Activities

Direct impacts to economic and business resources are not anticipated from the project Related Activities.

9.4. Mobility and Access Impacts

For all action alternatives, temporary detours during construction would likely increase travel times, change or remove access to properties, and limit mobility in the project area. These indirect adverse impacts would be short-term and localized to the project study area. Implementation of a traffic control plan and providing safe and efficient detour routes and advance notice of road closures will minimize impacts; therefore, the intensity of impacts is anticipated to be minor.

No Action Alternative

The rail-served warehousing and mixed-use development that is anticipated under the No Action Alternative may have access and mobility impacts similar to those described below for the action alternatives, depending upon the design and intensity of the development. However, these impacts are anticipated to be at a lesser scale than with the other alternatives.

Alternative 1: Applicant's Proposed Project (CSX – Southern to Milford / NS – Hospital District)

At the northern end of the Proposed Project site, the project will realign and grade-separate Cosgrove Avenue, over new rail tracks, from Spruill Avenue connecting to McMillan Avenue near Noisette Boulevard. This will allow for the undisturbed flow of both vehicular and rail traffic. Cosgrove Avenue will serve as one of the main vehicular access points to the Proposed Project and will provide direct access to I-26. McMillan Avenue from the Kephart Street to St. Johns Avenue will be eliminated. The remainder of McMillan Avenue will become an extension of St. Johns Avenue connecting to Spruill Avenue. Turnbull Avenue would be closed.

At the southern end of the Proposed Project site, the Viaduct Road Overpass would be closed and removed. Bainbridge Avenue and North Hobson Avenue would be realigned, including improvements to their intersection. With the removal of Viaduct Road, vehicular access to the southern end of the CNC would use a new local access road. Stromboli Avenue would be elevated from its existing at-grade configuration. The construction of the local access segment of the Port Access Road and the elevation of Stromboli Avenue would be an independent project undertaken by the SCDOT, and would be completed before the closure and removal of Viaduct road. New rail tracks will create one new major at-grade rail crossing on Meeting Street.

The Proposed Project would change the way residents of the Chicora-Cherokee neighbourhood access destinations on the east side of the proposed ICTF, such as the Free Harvest Medical Clinic and employment opportunities at Deytens Shipyard. These residents would no longer be able to use

Reynolds Avenue or Viaduct Road to travel east to Hobson Avenue; they would have to travel farther north on Spruill to use the new Cosgrove Avenue extension (approximately a 0.5-mile detour), or travel farther south to use the new Stromboli Avenue extension (approximately a 0.7-mile detour). Providing bicycle and pedestrian accommodations on these new roadway extensions may help to offset these adverse mobility and access impacts, reducing the anticipated severity of impact to minor.

It was noted during a site visit that employees of Deytens Shipyard currently use the parking lot on the south side of McMillan Avenue, west of Noisette Boulevard, and then walk east along McMillan Avenue to access the shipyard. Alternative 1 would impact this parking lot and would also remove this section of McMillan Avenue, which would impact access to the shipyard for employees. Coordination with the shipyard to find alternate parking arrangements for its employees, as well as provision of safe pedestrian connections to the shipyard, would help to minimize this impact.

Increased rail traffic from the project would have a long-term indirect effect on mobility in neighborhoods in the form of longer and/or more frequent delays at at-grade rail crossings. In addition to increased delays and reduced mobility at existing at-grade crossings, the Proposed Project would also introduce one new at-grade crossing at Meeting Street. Additional delay at rail crossings was a major concern voiced by residents at public meetings who felt they currently experience lengthy delays. The intensity of this impact will be determined in the traffic analysis.

Alternative 1 may impact the mobility of bus routes in the area. Specifically, CARTA Route 104 currently travels along McMillan Avenue to Noisette Boulevard and service be interrupted during construction of the Cosgrove Avenue flyover. CARTA Routes 10 and 11 would be delayed by lengthy closures of Meeting Street at the new at-grade crossing. Coordination with CARTA may help to minimize impacts to bus routes.

Barriers to the Elderly and Handicapped

Mobility and access impacts from Proposed Project would be short-term and localized to the project study area. ADA compliant sidewalks would be included with the Cosgrove Avenue flyover. The general population would experience delays by trains at at-grade rail crossings; therefore the project would not result in significant impacts in terms of new barriers to the elderly and handicapped.

Alternative 2: Proposed Project Site (CSX – Southern to Milford / NS – S-Line)

Mobility and access impacts under Alternative 2 are the same as Alternative 1, with the addition that St. Johns Avenue would be closed north of McMillan Avenue. This would have adverse indirect impacts to properties accessed from St. Johns Avenue, including small businesses, a church, a school, and many residences. However, the connection of Turnbull Avenue to St. Johns Avenue would be opened. This would reduce the severity of the impact by providing an alternate route to connect to Noisette Boulevard. With this connection, the overall intensity of this impact is anticipated to be minor.

Alternative 3: Proposed Project Site (CSX – Southern to Kingsworth / NS – Hospital District)

Mobility and access impacts under Alternative 3 are similar to Alternative 1.

Alternative 4: Proposed Project Site (CSX & NS – Southern to Milford)

Mobility and access impacts under Alternative 4 are the same as Alternative 1.

Alternative 5: River Center Site (CSX – Southern to Milford / NS-Hospital District)

Roadway improvements and modifications for the River Center site would include construction of a private drayage road south from the site through the Proposed Project site for 2 miles to connect to the HLT. Similar to Alternative 1, the Viaduct Road overpass would be closed and removed and Bainbridge Avenue and North Hobson Avenue realignment and intersection improvements would be completed. A new at-grade rail crossing would be constructed for the southern rail connection on Meeting Street.

The segment of McMillan Avenue between St. Johns Avenue and Noisette Boulevard would be closed. Hipp Street, Goldberg Avenue, Hobby Street, and portions of Turnbull Avenue, Truxton Avenue, Avenue F, and Avenue H would be closed. The segment of Cosgrove Avenue that is located east of Spruill Avenue would be closed to through-traffic, and would instead be used as the primary on-road truck access to the ICTF. Employee and visitor access for the ICTF would use St. Johns Avenue and Turnbull Avenue (after removal of the existing street closure at the intersection). Placement of the main gate to the ICTF would be on a realigned Cosgrove Avenue.

Alternative 5 would make it more difficult for residents of neighborhoods west and south of the project to access destinations to the east of the project, including Riverfront Park. This long-term indirect impact could be minimized by providing access (including bike and pedestrian accommodations) across the rail tracks and drayage road between Spruill Avenue and Hobson Avenue, possibly in the vicinity of Reynolds Avenue. If access is provided, the overall intensity of impacts is anticipated to be minor.

Similar to Alternative 1, this alternative would impact access to the Deytens Shipyard for employees using the parking lot along McMillan Avenue. Coordination with the shipyard to find alternate parking arrangements for its employees, as well as provision of safe pedestrian connections to the shipyard, would help to minimize this impact.

Alternative 5 would also impact CARTA Route 104, which currently runs along Spruill Avenue, Noisette Boulevard, and McMillan Avenue in the project area. Alternative 5 would eliminate access between Spruill Avenue and Noisette Boulevard in the vicinity of McMillan Avenue, and no alternate route is provided. Therefore, Route 104 would have to be re-routed. In addition, access to the CARTA superstop at the corner of Cosgrove Avenue and Rivers Avenue would likely be impacted by a high volume of trucks travelling on Cosgrove Avenue to access the ICTF. This may make it difficult for buses and riders to access the facility, and may also pose a potential safety issue due to high pedestrian activity near the superstop. Coordination with CARTA may help to minimize impacts to bus routes.

Alternative 5 would introduce additional traffic onto St. John's Avenue due to the location of the employee entrance on St. John's Avenue at Turnbull Avenue. This may have access impacts for St. Johns Catholic Church and School, which is located adjacent to the proposed employee entrance. Depending on the timing of employee shifts, it may be difficult for students and teachers to enter and leave the school. It should be noted that some of the parking spaces for the church/school back up directly onto St. Johns Avenue. Coordination with the school regarding shift hours, school hours, and mass times, and consideration of crossing guards or dedicated turn lanes, if warranted, may help to minimize impacts.

The new at-grade crossing on Meeting Street for the southern rail connection will directly impact mobility and cause additional delay by trains.

Alternative 6: River Center Site (CSX – Southern to Kingsworth / NS-Hospital District)

Mobility and access impacts under Alternative 6 are the same as Alternative 5.

Alternative 7: River Center Site (CSX & NS Southern to Milford)

Mobility and access impacts under Alternative 7 are the same as Alternative 5.

Related Activities

Direct impacts to mobility and access would result from the reactivation of rail tracks and train lengths. The increased train activity is likely to increase delay to pedestrians and vehicle traffic at all at-grade crossings.

9.5. Community Safety and Emergency Response Impacts

Community safety and emergency response impacts associated with the action alternatives are generally related to the construction of additional at-grade crossings and a notable increase in truck volumes on local streets, as described in the following sections. In January 2016, North Charleston's Fire Station 2 and Fire Station 8 were combined into a new Station 2 located at the corner of Carner Avenue and Clement Avenue within the DCIA. The consolidation of these stations was a result of all action alternatives displacing the old Station 2 which was located next to Sterett Hall. This consolidation of stations may have an impact on response times for properties to the north of the previous Station 2 location; however the severity of the impact is anticipated to be negligible since the new location is only one-half mile away and has direct access to a major roadway (Rivers Avenue).

According to the Charleston County Comprehensive Plan (October 2014), response time goals adopted by Charleston County EMS for urban/suburban areas are:

- Acceptable – Response time less than 8 minutes 80 percent of the time
- Marginal – Response time between 8 and 15 minutes
- Unacceptable – Response time greater than 15 minutes

No Action Alternative

The No Action Alternative also has the potential for safety and emergency response concerns if new at-grade crossings are constructed to serve the rail-served warehousing. The severity of these impacts would be dependent upon the location of any new at-grade crossings.

Alternative 1: Applicant's Proposed Project (CSX – Southern to Milford / NS – Hospital District)

Construction of the rail and ROW improvements at Meeting Street for the southern rail connection will result in one new major at-grade rail crossing. This new at-grade rail crossing would have adverse indirect impacts to community safety by introducing a new conflict point between trains and automobiles, bicycles, and pedestrians. There are existing bike lanes and sidewalks along Meeting Street at the location of this proposed new at-grade crossing. Crossing gates and signals may help to minimize impacts.

This new at-grade crossing would also have adverse impact on emergency response times since there is the potential for Meeting Street to be blocked by a train approximately 20 minutes¹, twice a day when the CSX trains are entering and leaving the ICTF. Detour routes are available, but they would likely increase response times and also likely travel through residential areas, depending on the location of the emergency. There is also the potential for detour routes to be blocked if another train is traveling through the area at the same time. Adverse long-term impacts on emergency response times could be minimized through coordination with emergency service providers and designation of emergency response routes. The grade separation of Cosgrove Avenue over proposed rail tracks in Alternative 1 will benefit east west mobility for automobiles, bicycles, and pedestrians. The grade separated bridge will also benefit emergency responders with reduced response times. Overall intensity of impacts to emergency services is anticipated to minor to major.

Alternative 2: Proposed Project Site (CSX – Southern to Milford / NS – S-Line)

Impacts to community safety and emergency response under Alternative 2 are the same as Alternative 1.

Alternative 3: Proposed Project Site (CSX – Southern to Kingsworth / NS – Hospital District)

Impacts to community safety and emergency response under Alternative 3 are the same as Alternative 1.

Alternative 4: Proposed Project Site (CSX & NS – Southern to Milford)

Impacts to community safety and emergency response under Alternative 4 are the same as Alternative 1.

Alternative 5: River Center Site (CSX – Southern to Milford / NS-Hospital District)

Alternative 5 would have direct adverse impacts to community safety and emergency response as it eliminates almost all east-west routes in the DCIA. McMillan Avenue and Reynolds Avenue would no longer provide a connection from Spruill Avenue to Noisette Boulevard. Cosgrove Avenue east of Spruill Avenue would only provide access to the River Center site.

Similar to Alternative 1, construction of the rail and ROW improvements at Meeting Street for the southern rail connection will result in one new major at-grade rail crossing. This new at-grade rail crossing would have adverse indirect impacts to community safety by introducing a new conflict point between trains and automobiles, bicycles, and pedestrians. There are existing bike lanes and sidewalks along Meeting Street at the location of this proposed new at-grade crossing. Crossing gates and signals may help to minimize impacts.

The removal of east-west access in the DCIA and the new at-grade crossing would have adverse impacts on emergency response times. The closest EMS station is located on Dorchester Road west of the DCIA. Emergency responders coming from the west side of the DCIA would have to go north of Noisette Creek then east to connect to Noisette Boulevard to access properties along the Cooper River. Emergency responders dispatching from Fire Station 2 on the corner of Carner Avenue and Clement Avenue will

¹ Based on an 8,000-foot train traveling at five miles per hour through the crossing.

have to travel south to the future Stromboli Avenue bridge over rail tracks then north on the improved Bainbridge Avenue to access properties on the Cooper River.

Similar to Alternative 1, there is the potential for Meeting Street to be blocked by a train approximately 20 minutes², twice a day when the CSX trains are entering and leaving the ICTF. Detour routes are available, but they would likely increase response times and also likely travel through residential areas, depending on the location of the emergency. There is also the potential for detour routes to be blocked if another train is traveling through the area at the same time. Adverse long-term impacts on emergency response times could be minimized through coordination with emergency service providers and designation of emergency response routes.

Alternative 6: River Center Site (CSX – Southern to Kingsworth / NS-Hospital District)

Impacts to community safety and emergency response under Alternative 6 are the same as Alternative 5.

Alternative 7: River Center Site (CSX & NS Southern to Milford)

Impacts to community safety and emergency response under Alternative 6 are the same as Alternative 5.

Related Activities

Adverse indirect impacts to community safety and emergency response are anticipated from project Related Activities. Increased train activity is likely to increase delay to emergency responders at all at-grade crossings.

9.6. Overall Impacts to Neighborhoods and Environmental Justice Considerations

In order to evaluate overall impacts to neighborhoods in the study area, the combination of all impacts evaluated in this Community Impact Assessment were considered in terms of how neighborhoods would be affected. Since all of the neighborhoods surrounding the Proposed Project site and River Center site include minority and/or low-income populations that meet the criteria for Environmental Justice consideration (as described in **Section 6.3**), neighborhood impacts were also evaluated in light of the Environmental Justice regulations described below.

Title VI of the Civil Rights Act of 1964 protects individuals from discrimination on the grounds of race, age, color, religion, disability, sex, and national origin. In accordance with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations," federal agencies are mandated to identify and address any disproportionately high and adverse effects on minority and/or low-income populations. The Order also directs federal agencies to provide minority and low-income communities access to public information and meaningful public participation. The three Environmental Justice principles are:

- 1) to ensure the full and fair participation of all potentially affected communities in the transportation decision-making process;

² Based on an 8,000-foot train traveling at five miles per hour through the crossing.

- 2) to avoid, minimize or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority or low income populations; and
- 3) to fully evaluate the benefits and burdens of transportation programs, policies, and activities, upon low-income and minority populations.

A disproportionately high and adverse effect on minority and low-income populations means an adverse effect that:

- 1) Is predominately borne by a minority population and/or a low-income population; or
- 2) Will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the nonminority population and/or non low-income population.

Communities and neighborhoods surrounding the project alternatives would experience noise, vibration, air quality, visual, and ROW impacts. These impacts and proposed mitigation for them will be discussed in detail in the EIS for the project. Information from these sections is included in this section as applicable when discussing the overall range and intensity of impacts communities and neighborhoods may experience as a result of the project alternatives. The following socioeconomic impacts were evaluated in the preceding sections: community resources, cohesion and stability; economic and business resources; access and mobility; and community safety and emergency response. These socioeconomic impacts combined with the physical impacts discussed in other sections of this EIS have an overall impact on the communities and neighborhoods surrounding the project.

Neighborhoods within the DCIA (shown on **Figure 4**) include Olde North Charleston, Chicora-Cherokee (made up of Chicora Place and Cherokee Place), Windsor, Howard Heights, and Union Heights. The overall impacts to these neighborhoods and their EJ populations resulting from each of the project alternatives are discussed below.

No Action Alternative

The rail-served warehousing and mixed-use development that is anticipated under the No Action Alternative may have neighborhood impacts similar to those described below for the action alternatives, depending upon the design and intensity of the development. However, these impacts are anticipated to be at a lesser scale with the No Action Alternative than with the other alternatives.

Environmental Justice principles would not apply to the No Action Alternative since no federal action would be involved and the project would be developed in accordance with local zoning regulations.

Alternative 1: Applicant's Proposed Project (CSX – Southern to Milford / NS – Hospital District)

The Proposed Project would directly impact the Chicora-Cherokee neighborhood and indirectly impact the Olde North Charleston and Union Heights neighborhoods.

The Chicora-Cherokee neighborhood directly borders the western boundary of the Proposed Project site and has the potential for noise, vibration, air quality, economic, aesthetic, mobility, access, ROW, and community cohesion impacts as a result of the Proposed Project. Overall intensity of noise and vibration impacts will be determined in the noise and vibration analysis. Economic impacts include potential loss of business activity and investment in the neighborhood. Aesthetic impacts to the neighborhood include loss of housing replaced with views of an earthen berm and noise wall. Mobility and access impacts include changes in the way residents of the neighborhood access destinations on the east side

of the proposed project, including the Harvest Free Medical Clinic and employment opportunities at the shipyard, and potential changes and delays to bus routes. Construction of the earthen berm will result in the relocation of 106 residential units. The neighborhood would also be impacted by the loss of Sterett Hall, which has provided free indoor recreational opportunities to the community since the Navy base closure in 1996. The overall total of direct and indirect impacts to the Chicora-Cherokee neighborhood would likely result in an overall impact intensity that is moderate to major, and would be a significant impact to this neighborhood.

The Olde North Charleston neighborhood generally includes the portion of the DCIA north of Noiset Creek. The southern portion of this neighborhood has the potential for noise, vibration, mobility, and safety impacts as a result of increased rail activity as part of the Proposed Project. Noise and vibration impacts would likely be limited to properties such as the Hunley Waters housing development near O'Hear Avenue. The combination of direct and indirect impacts to the Olde North Charleston neighborhood would likely result in an overall impact intensity that is minor to moderate, depending upon the level of safety and mobility impacts that remain after mitigation.

Located in the south central DCIA, the Union Heights neighborhood has the potential for noise, vibration, mobility, and safety impact as a result of increased rail activity as part of the Proposed Project. Dormant rail tracks will be reactivated east and west of the neighborhood and a new at-grade rail crossing will be constructed on Meeting Street south of the neighborhood. The combination of direct and indirect impacts to the Union Heights neighborhood would likely result in an overall impact intensity that is minor to moderate, depending upon the level of safety and mobility impacts that remain after mitigation.

Alternative 1 has the potential for disproportionately high and adverse impacts to Environmental Justice populations. The adverse impacts associated with the Proposed Project site would be predominantly borne by the minority and low-income population and are appreciably more severe than the adverse effects that would be suffered by the nonminority and non low-income population of the City of North Charleston and Charleston County. With regard to benefits and burdens, the benefits of the Proposed Project would extend to the greater Charleston region, while the burdens would be borne by the Environmental Justice community adjacent to the project. Therefore, the benefits and burdens of the Proposed Project are not equitably distributed.

Continued coordination with the neighborhood associations for Chicora-Cherokee, Olde North Charleston, Union Heights, LAMC, and the City of North Charleston will be essential to keep the community informed and identify ways to minimize and mitigate impacts. Potential mitigation efforts could include funding neighborhood enhancement projects, providing scholarship programs and job training, working with the neighborhood to design noise and visual buffers, purchasing the most impacted properties directly adjacent to the ICTF, funding an air quality monitoring program, and organizing health screenings for the community.

Alternative 2: Proposed Project Site (CSX – Southern to Milford / NS – S-Line)

Neighborhood and Environmental Justice impacts associated with Alternative 2 are the same as Alternative 1.

Alternative 3: Proposed Project Site (CSX – Southern to Kingsworth / NS – Hospital District)

Neighborhood and Environmental Justice impacts associated with Alternative 2 are the same as Alternative 1 with the following additional direct impacts to the Union Heights neighborhood. New rail along Kingsworth Avenue will result in the relocation of 8 residential units.

Alternative 4: Proposed Project Site (CSX & NS – Southern to Milford)

Neighborhood and Environmental Justice impacts associated with Alternative 4 are the same as Alternative 1.

Alternative 5: River Center Site (CSX – Southern to Milford / NS-Hospital District)

Alternative 5 would directly impact the Chicora-Cherokee neighborhood and the West Yard Lofts low-income community. Alternative 5 would indirectly impact the Olde North Charleston and Union Heights neighborhoods.

While the main ICTF facility would be located on the River Center site, the tail tracks and drayage road would be located directly adjacent to the Chicora-Cherokee neighborhood. The earthen berm and noise wall would not be built along western property boundary. The neighborhood would still experience similar noise, vibration, air quality, economic, mobility, access, safety, and community cohesion impacts as a result of Alternative 1. Overall intensity of noise and vibration impacts will be determined in the noise and vibration analysis. Economic impacts include potential loss of business activity and investment in the neighborhood. Mobility and access impacts include changes in the way residents of the neighborhood access destinations on the east side of the proposed project, including Riverfront Park, the Harvest Free Medical Clinic, and employment opportunities at the shipyard, and potential changes and delays to bus routes. There is potential for safety impacts in the northern portion of the Cherokee Place neighborhood along Cosgrove Avenue near the CARTA superstop due to high volumes of truck traffic. The neighborhood would also be impacted by the loss of Sterett Hall, which has provided free indoor recreational opportunities to the community since the Navy base closure in 1996.

Alternative 5 would directly impact West Yard Lofts, a 60-unit low-income housing development that opened in 2011 on the River Center site. The impact would result in displacement of this low-income community, which would be a disproportionately high and adverse impact compared to impacts that would be suffered by non low-income populations.

The indirect impacts to the Olde North Charleston and Union Heights from Alternative 5 are the same as those identified for Alternative 1.

Alternative 5 has the potential for disproportionately high and adverse impacts to Environmental Justice populations. The adverse impacts associated with the Alternative 5 would be predominantly borne by the minority and low-income population and are appreciably more severe than the adverse effects that would be suffered by the nonminority and non low-income population of the City of North Charleston and Charleston County. With regard to benefits and burdens, the benefits of Alternative 5 would extend to the greater Charleston region, while the burdens would be borne by the Environmental Justice community adjacent to the project. Therefore, the benefits and burdens of Alternative 5 are not equitably distributed.

Continued coordination with the neighborhood associations for Chicora-Cherokee and Olde North Charleston, Union Heights, LAMC, and the City of North Charleston will be essential to keep the community informed and identify ways to minimize and mitigate impacts. Potential mitigation efforts could include, funding neighborhood enhancement projects, providing scholarship programs and job training, working with the neighborhood to design noise and visual buffers, working with the owner of West Yard Lofts to find a replacement facility, purchasing the most impacted properties directly adjacent to the ICTF, funding an air quality monitoring program, and organizing health screenings for the community.

Alternative 6: River Center Site (CSX – Southern to Kingsworth / NS-Hospital District)

Neighborhood and Environmental Justice impacts associated with Alternative 6 are the same as Alternative 5 with the following additional direct impacts to the Union Heights neighborhood. New rail along Kingsworth Avenue will result in the relocation of 8 residential units.

Alternative 7: River Center Site (CSX & NS Southern to Milford)

Neighborhood and Environmental Justice impacts associated with Alternative 7 are the same as Alternative 5.

Related Activities

Adverse indirect impacts from noise and vibration are anticipated from increased train activity with project Related Activities. Overall intensity of noise and vibration impacts will be determined in the noise and vibration analysis.

9.7. Recurring Community/Neighborhood Impacts

There is the potential for recurring impacts to neighborhoods previously impacted by activities at the port and other projects in the area, including the marine container terminal, the I-26 access ramps to Meeting Street, the port access road, and the former Charleston County incinerator to the south of the Proposed Project. Recurring effects would be limited to areas impacted by these previous and ongoing projects, which generally includes the Union Heights and Windsor neighborhoods. These neighborhoods would be indirectly impacted by all of the alternatives. These neighborhoods may experience some noise, air quality, and visual impacts. These impacts could be minimized by working with the Union Heights neighborhood association to identify enhancement projects and support community programs. Overall intensity of impacts is anticipated to be minor.

9.8. Summary of Socioeconomic and Environmental Justice Impacts by Alternative

Table 6 summarizes the socioeconomic and Environmental Justice impacts associated with each project alternative.

Table 6: Summary of Socioeconomic and Environmental Justice Impacts by Alternative

Alternative	Impact Type					
	Community Resources, Cohesion, and Stability	Economic and Business Resources	Mobility and Access	Community Safety and Emergency Responses	Neighborhood Impacts and Environmental Justice Considerations	Recurring Community/Neighborhood Impacts
No Action Alternative	<ul style="list-style-type: none"> Construction and operation of rail-served warehousing and mixed-use development anticipated under No Action Alternative would result in impacts to community resources, cohesion, and stability that are similar to the action alternatives, but actual impacts would be dependent upon the timing and final design of the development. Sterett Hall and two arts buildings would be closed. 	<ul style="list-style-type: none"> The rail-served warehousing and mixed-use development that is anticipated under the No Action Alternative would likely have many of the same beneficial and adverse economic impacts as the action alternatives; however, these impacts are anticipated to be at a lesser scale with the No Action than with the action alternatives. 	<ul style="list-style-type: none"> The rail-served warehousing and mixed-use development that is anticipated under the No Action Alternative may have access and mobility impacts similar to those described for the action alternatives, depending upon the design and intensity of the development. However, these impacts are anticipated to be at a lesser scale with the No Action Alternative than with the action alternatives. 	<ul style="list-style-type: none"> The No Action Alternative has the potential for safety and emergency response concerns if new at-grade crossings are constructed to serve the rail-served warehousing. The severity of these impacts would be dependent upon the location of any new at-grade crossings. 	<ul style="list-style-type: none"> The rail-served warehousing and mixed-use development that is anticipated under the No Action Alternative may have neighborhood impacts similar to those described above for the action alternatives, depending upon the design and intensity of the development. However, these impacts are anticipated to be at a lesser scale with the No Action Alternative than with the other alternatives. Environmental Justice principles would not apply to the No Action Alternative since no federal action would be involved and the project would be developed in accordance with local zoning regulations. 	<ul style="list-style-type: none"> Recurring impacts are not anticipated as a result of the No Action Alternative.
Alternative 1: Applicant's Proposed Project (CSX – Southern to Milford / NS – Hospital District)	<ul style="list-style-type: none"> Relocation of 106 residential units from the Chicora-Cherokee neighborhood Proposed Project not consistent with local vision for the area – may impact stability of new businesses and 	<ul style="list-style-type: none"> Proposed project would provide economic benefits to the regional and local economy. The northern rail connection through the River Center neighborhood has potential to impact businesses including Lowcountry Orphan 	<ul style="list-style-type: none"> Temporary detours during construction would likely increase travel times, change or remove access to properties, and limit mobility in the project area. These indirect adverse impacts would be short-term and 	<ul style="list-style-type: none"> Construction of the rail and ROW improvements at Meeting Street for the southern rail connection will result in one new major at-grade rail crossing. This at-grade crossing would have adverse indirect impacts to 	<ul style="list-style-type: none"> The Chicora-Cherokee neighborhood directly borders the western boundary of the Proposed Project site and has the potential for noise, vibration, air quality, economic, aesthetic, mobility, access, ROW, and community cohesion impacts as a result of the Proposed Project. The overall total of direct and 	<ul style="list-style-type: none"> There is the potential for recurring impacts to neighborhoods previously impacted by activities at the port and other projects in the area, including the marine container terminal, the I-26 access ramps to Meeting Street, the port access road, and the former Charleston

Table 6: Summary of Socioeconomic and Environmental Justice Impacts by Alternative

Alternative	Impact Type					
	Community Resources, Cohesion, and Stability	Economic and Business Resources	Mobility and Access	Community Safety and Emergency Responses	Neighborhood Impacts and Environmental Justice Considerations	Recurring Community/Neighborhood Impacts
	residential development.	<p>Relief and an office building used by the Department of Defense.</p> <ul style="list-style-type: none"> The southern rail connection will displace several business just north of Milford Street. If trucks are queuing along Hobson Avenue and blocking access to Supply Street, this would have an indirect adverse impact on businesses along the water that are accessed via Supply Street, including Pierside Boatworks, the H.L. Hunley Confederate Submarine (museum and tourist site), and the Clemson University Restoration Institute. The Proposed Project has the potential for long-term indirect 	<p>localized to the project study area.</p> <ul style="list-style-type: none"> The Proposed Project would change the way residents of the Chicora-Cherokee neighbourhood access destinations on the east side of the proposed ICTF, such as the Free Harvest Medical Clinic and employment opportunities at Deytens Shipyard. It was noted during a site visit that employees of Deytens Shipyard currently use the parking lot on the south side of McMillan Avenue, west of Noisette Boulevard, and then walk east along McMillan Avenue to access the shipyard. Alternative 1 would impact this parking lot and would also remove this section 	<p>community safety by introducing new conflict points between trains and automobiles, bicycles, and pedestrians. There are existing bike lanes and sidewalks along Meeting Street at the location of the proposed new at-grade crossing.</p> <ul style="list-style-type: none"> This new at-grade crossing would also have adverse impacts on emergency response times since there is the potential for Meeting Street to be blocked by a train for approximately 20 minutes³, twice a day when the CSX trains are entering and leaving the ICTF. Detour routes are available, but they would likely increase response 	<p>indirect impacts to the Chicora-Cherokee neighborhood would likely result in an overall impact intensity that is moderate to major, and would be a significant impact to this neighborhood.</p> <ul style="list-style-type: none"> Relocation of 106 residential units from Chicora-Cherokee neighborhood. Noise and vibration impacts to the Olde North Charleston and Union Heights neighborhoods. Alternative 1 has potential for disproportionately high and adverse impacts to Environmental Justice populations. The adverse impacts associated with the Alternative 1 would be predominantly borne by the minority and low-income population and are appreciably more severe than the adverse effects that would be suffered by the nonminority and non low-income population of the City of North Charleston and Charleston County. With regard to benefits and burdens, the benefits of the 	<p>County incinerator to the south of the Proposed Project. Recurring effects would be limited to areas impacted by these previous and ongoing projects, which generally includes the Union Heights and Windsor neighborhoods. These neighborhoods would be indirectly impacted by all of the alternatives. The neighborhoods may experience some noise, air quality, and visual impacts.</p>

³ Based on an 8,000-foot train traveling at five miles per hour through the crossing.

Table 6: Summary of Socioeconomic and Environmental Justice Impacts by Alternative

Alternative	Impact Type					
	Community Resources, Cohesion, and Stability	Economic and Business Resources	Mobility and Access	Community Safety and Emergency Responses	Neighborhood Impacts and Environmental Justice Considerations	Recurring Community/Neighborhood Impacts
		impacts to businesses near the project site if noise or aesthetic impacts cause a loss of customers.	<p>of McMillan Avenue, which would impact access to the shipyard for employees.</p> <ul style="list-style-type: none"> Increased rail traffic from the project would have a long-term indirect effect on mobility in neighborhoods in the form of longer and/or more frequent delays at at-grade rail crossings. In addition to increased delays and reduced mobility at existing at-grade crossings, the Proposed Project would also introduce one new at-grade crossing on Meeting Street. Alternative 1 may impact the mobility of bus routes in the area. Specifically, CARTA Routes 10, 11, and 104. 	<p>times and also likely travel through residential areas, depending on the location of the emergency. There is also the potential for detour routes to be blocked if another train is traveling through the area at the same time.</p> <ul style="list-style-type: none"> The grade separation of Cosgrove Avenue over proposed rail tracks will benefit emergency responders by reducing response times. 	Proposed Project would extend to the greater Charleston region, while the burdens would be borne by the Environmental Justice community adjacent to the project. Therefore, the benefits and burdens of the Proposed Project are not equitably distributed.	
Alternative 2: Proposed Project Site (CSX –	<ul style="list-style-type: none"> Community resources, cohesion, and stability impacts 	<ul style="list-style-type: none"> Economic and business resource impacts are the same as those 	<ul style="list-style-type: none"> Mobility and access impacts are the same as Alternative 1. 	<ul style="list-style-type: none"> Community safety and emergency response impacts 	<ul style="list-style-type: none"> Neighborhood and Environmental Justice impacts are the same as Alternative 1. 	<ul style="list-style-type: none"> Recurring impacts are the same as Alternative 1.

Table 6: Summary of Socioeconomic and Environmental Justice Impacts by Alternative

Alternative	Impact Type					
	Community Resources, Cohesion, and Stability	Economic and Business Resources	Mobility and Access	Community Safety and Emergency Responses	Neighborhood Impacts and Environmental Justice Considerations	Recurring Community/Neighborhood Impacts
Southern to Milford / NS – S-Line)	would be the same as Alternative 1.	<p>associated with Alternative 1.</p> <ul style="list-style-type: none"> In addition, commercial properties around the Spruill Avenue/Aragon Avenue/Bexley Street intersection will be affected by increased rail activity. 	<ul style="list-style-type: none"> In addition, St. Johns Avenue would be closed north of McMillan Avenue. This would have adverse indirect impacts to properties accessed from St. Johns Avenue, including small businesses, a church, a school, and many residences. However, the connection of Turnbull Avenue to St. Johns Avenue would be opened. This would reduce the severity of the impact. 	are the same as Alternative 1.		
Alternative 3: Proposed Project Site (CSX – Southern to Kingsworth / NS – Hospital District)	<ul style="list-style-type: none"> Relocation of 106 residential units from the Chicora-Cherokee neighborhood and 8 residential units from the Union Heights neighborhood All other community resources, cohesion, and stability impacts 	<ul style="list-style-type: none"> Economic and business resource impacts are the same as Alternative 1, except the businesses north of Milford Street would be avoided. 	<ul style="list-style-type: none"> Mobility and access impacts are similar to Alternative 1. 	<ul style="list-style-type: none"> Community safety and emergency response impacts are the same as Alternative 1. 	<ul style="list-style-type: none"> Neighborhood and Environmental Justice impacts are the same as Alternative 1. In addition, new rail along Kingsworth Avenue will result in the relocation of 8 residential units. 	<ul style="list-style-type: none"> Recurring impacts are the same as Alternative 1.

Table 6: Summary of Socioeconomic and Environmental Justice Impacts by Alternative

Alternative	Impact Type					
	Community Resources, Cohesion, and Stability	Economic and Business Resources	Mobility and Access	Community Safety and Emergency Responses	Neighborhood Impacts and Environmental Justice Considerations	Recurring Community/Neighborhood Impacts
	would be the same as Alternative 1.					
Alternative 4: Proposed Project Site (CSX & NS – Southern to Milford)	<ul style="list-style-type: none"> Community resources, cohesion, and stability impacts would be the same as Alternative 1. 	<ul style="list-style-type: none"> Economic and business resource impacts are the same as those associated with Alternative 1. 	<ul style="list-style-type: none"> Mobility and access impacts are the same Alternative 1. 	<ul style="list-style-type: none"> Community safety and emergency response impacts are the same as Alternative 1. 	<ul style="list-style-type: none"> Neighborhood and Environmental Justice impacts are the same as Alternative 1. 	<ul style="list-style-type: none"> Recurring impacts are the same as Alternative 1.
Alternative 5: River Center Site (CSX – Southern to Milford / NS-Hospital District)	<ul style="list-style-type: none"> Direct impacts to several community resources –West Yard Lofts (low-income housing), and Lowcountry. Innovation Center. Relocation of 62 residential units Potential direct impacts to Lowcountry Orphan Relief if access is affected. Not consistent with local vision for the area – may impact stability of new businesses and residential development. 	<ul style="list-style-type: none"> Proposed project would provide economic benefits to the regional and local economy. Several businesses including the Lowcountry Innovation Center (housing 15 or more companies) would be displaced. The main gate for trucks coming from I-26 would be located on an extension of Cosgrove Avenue. The volume of trucks would have a notable long-term indirect impact on businesses located on Cosgrove Avenue. The southern rail connection will 	<ul style="list-style-type: none"> The River Center alternative would make it more difficult for residents of neighborhoods west and south of the project to access destinations to the east of the project, including Riverfront Park. Similar to Alternative 1, this alternative would impact access to the Deytens Shipyard for employees using the parking lot along McMillan Avenue. Alternative 5 would impact CARTA Route 104, which currently runs along Spruill Avenue, Noisette Boulevard, 	<ul style="list-style-type: none"> Community safety and emergency response impacts are the same as Alternative 1. In addition, Alternative 5 eliminates almost all east-west routes in the DCIA. McMillan Avenue and Reynolds Avenue would no longer provide a connection from Spruill Avenue to Noisette Boulevard. Cosgrove Avenue east of Spruill Avenue would only provide access to the River Center ICTF. The removal of east-west access s in the DCIA would adverse impacts on 	<ul style="list-style-type: none"> While the main ICTF facility would be located on the River Center site, the tail tracks and drayage road would be located directly adjacent to the Chicora-Cherokee neighborhood. The earthen berm and noise wall in Alternative 1 would not be built. The neighborhood would still experience noise, vibration, air quality, economic, mobility, access, safety, and community cohesion impacts as a result of Alternative 5. The overall total of direct and indirect impacts to the Chicora-Cherokee neighborhood would likely result in a moderate level of overall impact intensity. Relocation of 60 residential units from West Yard Lofts development. 	<ul style="list-style-type: none"> Recurring impacts are the same as Alternative 1.

Table 6: Summary of Socioeconomic and Environmental Justice Impacts by Alternative

Alternative	Impact Type					
	Community Resources, Cohesion, and Stability	Economic and Business Resources	Mobility and Access	Community Safety and Emergency Responses	Neighborhood Impacts and Environmental Justice Considerations	Recurring Community/Neighborhood Impacts
		<p>displace several business just north of Milford Street.</p> <ul style="list-style-type: none"> The Proposed Project has the potential for long-term indirect impacts to businesses near the project site if noise or aesthetic impacts cause a loss of customers. 	<p>and McMillan Avenue in the project area. Alternative 5 would eliminate access between Spruill Avenue and Noisette Boulevard in the vicinity of McMillan Avenue, and no alternate route is provided.</p> <ul style="list-style-type: none"> Alternative 5 would introduce additional traffic onto St. John's Avenue due to the location of the employee entrance on St. John's Avenue at Turnbull Avenue. This may have access impacts for St. Johns Catholic Church and School, which is located adjacent to the proposed employee entrance. Depending on the timing of employee shifts, it may be difficult for students and teachers to enter and leave the school. It should be 	<p>emergency response times.</p>	<ul style="list-style-type: none"> Noise and vibration impacts to the Olde North Charleston and Union Heights neighborhoods. Alternative 5 has the potential for disproportionately high and adverse impacts to Environmental Justice populations. The adverse impacts associated with the Alternative 5 would be predominantly borne by the minority and low-income population and are appreciably more severe than the adverse effects that would be suffered by the nonminority and non low-income population of the City of North Charleston and Charleston County. With regard to benefits and burdens, the benefits of the Alternative 2 would extend to the greater Charleston region, while the burdens would be borne by the Environmental Justice community adjacent to the project. Therefore, the benefits and burdens of Alternative 2 are not equitably distributed. 	

Table 6: Summary of Socioeconomic and Environmental Justice Impacts by Alternative

Alternative	Impact Type					
	Community Resources, Cohesion, and Stability	Economic and Business Resources	Mobility and Access	Community Safety and Emergency Responses	Neighborhood Impacts and Environmental Justice Considerations	Recurring Community/Neighborhood Impacts
			noted that some of the parking spaces for the church/school back up directly onto St. Johns Avenue.			
Alternative 6: River Center Site (CSX – Southern to Kingsworth / NS-Hospital District)	<ul style="list-style-type: none"> Relocation of 60 residential units (West Yard Lofts) and 8 residential units from the Union Heights neighborhood All other community resources, cohesion, and stability impacts would be the same as Alternative 5. 	<ul style="list-style-type: none"> Economic and business resource impacts are the same as Alternative 5, except the businesses north of Milford Street would be avoided. 	<ul style="list-style-type: none"> Mobility and access impacts are the same as Alternative 5. 	<ul style="list-style-type: none"> Community safety and emergency response impacts are the same as Alternative 5. 	<ul style="list-style-type: none"> Neighborhood and Environmental Justice impacts are the same as Alternative 5. In addition, new rail along Kingsworth Avenue will result in the relocation of 8 residential units. 	<ul style="list-style-type: none"> Recurring impacts are the same as Alternative 1.
Alternative 7: River Center Site (CSX & NS Southern to Milford)	<ul style="list-style-type: none"> Community resources, cohesion, and stability impacts would be the same as Alternative 5. 	<ul style="list-style-type: none"> Economic and business resource impacts are the same as those associated with Alternative 5. 	<ul style="list-style-type: none"> Mobility and access impacts are the same as Alternative 5. 	<ul style="list-style-type: none"> Community safety and emergency response impacts are the same as Alternative 5. 	<ul style="list-style-type: none"> Neighborhood and Environmental Justice impacts are the same as Alternative 5. 	<ul style="list-style-type: none"> Recurring impacts are the same as Alternative 1.

Table 6: Summary of Socioeconomic and Environmental Justice Impacts by Alternative

Alternative	Impact Type					
	Community Resources, Cohesion, and Stability	Economic and Business Resources	Mobility and Access	Community Safety and Emergency Responses	Neighborhood Impacts and Environmental Justice Considerations	Recurring Community/Neighborhood Impacts
Related Activities	<ul style="list-style-type: none"> Direct impacts are not anticipated to community resources, cohesion, and stability from Related Activities. 	<ul style="list-style-type: none"> Direct impacts are not anticipated to economic and business resources from Related Activities. 	<ul style="list-style-type: none"> Direct impacts to mobility and access are anticipated from the reactivation of rail track and train lengths resulting in delay to pedestrians and vehicle traffic at all at-grade crossings. 	<ul style="list-style-type: none"> Adverse indirect impacts to community safety and emergency response are anticipated from the reactivation of rail track and train lengths resulting in delay to emergency responders. 	<ul style="list-style-type: none"> Adverse indirect impacts to area neighborhoods from noise and vibration are anticipated from increased train activity with project Related Activities. 	<ul style="list-style-type: none"> Recurring impacts from increased rail activity.

10.Recommendations

The following recommendations should be considered to reduce the severity of community impacts identified in the previous sections. Most of the recommendations are applicable to all alternatives, but there are a few recommendations specific to alternatives, as indicated in the list below.

All Alternatives

- Coordinate with the City of North Charleston to identify opportunities to transfer programs and services at Sterett Hall to the Chicora Life Center at the corner of McMillian Avenue and Spruill Avenue, which is planned to include a recreational facility.
- Work with the community to implement community revitalization efforts, such as the revitalization of the Reynolds Avenue corridor (currently being studied by Metanoia) or the Stromboli Avenue corridor (included in the LAMC Area Revitalization Plan). Provide support to community organizations with goals of revitalization and economic development.
- Implement mitigation measures for noise and aesthetic impacts as identified in the analyses for these resources in the EIS.
- Implement a traffic control plan to provide safe and efficient detour routes and advance notice of road closures during project construction.
- Provide bicycle and pedestrian accommodations on new roadway extensions to offset adverse mobility and access impacts. Also provide improvements to pedestrian and bicycle access to Riverfront Park.
- Coordinate with the Deytens Shipyard to find alternate parking arrangements for its employees as well as provide safe pedestrian connections to the shipyard.
- Coordinate with CARTA to minimize impacts to bus routes.
- Continue to coordinate with the neighborhood associations for Chicora-Cherokee, Union Heights, and Olde North Charleston, LAMC, and the City of North Charleston to keep the community informed and identify ways to minimize and mitigate impacts. Potential mitigation efforts could include working with the City to provide a replacement facility for Sterett Hall, funding neighborhood enhancement projects, providing scholarship programs and job training, working with the neighborhood to design noise and visual buffers, purchasing the most impacted properties directly adjacent to the ICTF, funding an air quality monitoring program, and organizing health screenings for the community.
- Coordinate with emergency service providers during construction to minimize effects on response times.
- Compensate any person(s) whose property needs to be acquired, in accordance with the U.S. Constitution and Uniform Act of 1970, as amended.
- Phase relocations for renters to other rental properties as they become available in nearby or adjacent neighborhoods.

Alternative 2

- St. Johns Avenue is proposed to be closed just north of McMillan Avenue, keep Turnbull Avenue open for properties along St. Johns Avenue access to Noisette Boulevard

Alternatives 5, 6, and 7: River Center Site

- Provide relocation assistance and work with the owner and residents of West Yard Lofts to find replacement facilities or a replacement site for this low-income community.
- Provide bicycle and pedestrian access across rail tracks and the drayage road between Spruill Avenue and Hobson Avenue, possibly in the vicinity of Reynolds Avenue
- Coordinate with St. John's Catholic Church and School regarding shift hours at the ICTF, school hours and mass times to help minimize traffic impacts and conflicts between the church and the entry gate to the ICTF. Consider using crossing guards or dedicated turn lanes, if warranted.

Sources

Assisted Living Facilities

<http://www.assistedlivingfacilities.org/directory/sc/charleston/>

Berkeley/Charleston/Dorchester Council of Governments

<http://www.bcdkog.com>

Charleston County School District

<http://www.ccsdschools.com>

City of North Charleston

Maps: <http://www.northcharleston.org/business/constructionDev/services/publicationsAndMaps.aspx>

Grocery Stores: <http://gis.northcharleston.org/Grocery/index.html>

Sterett Hall: <http://www.northcharleston.org/Residents/Arts-and-Culture/Facilities-and-Rentals.aspx>

Fire Department: <http://www.northcharleston.org/Residents/Fire-Department/Strategic-Plan.aspx>

Parks and Recreation Department, personal communication with Ed Barfield, Director, August 26, 2014.

Police Department: <http://www.northcharleston.org/Residents/Police/Divisions-and-Bureaus/Uniform-Patrol.aspx>

Federal Law Enforcement Training Center

<https://www.fletc.gov/about-charleston-center>

Gussie Green Technology Center

http://www.clemson.edu/public/ciecd/focus_areas/entrepreneurship/programs/ggtc.html

Harvest Free Medical Clinic

<http://hfmc.org/about.html>

Lowcountry Innovation Center

<http://www.lowcountryinnovationcenter.com>

Lowcountry Orphan Relief

<http://www.lowcountryorphanrelief.org>

Metanoia

<http://www.pushingforward.org>

Owens Christian Academy

<http://owenschristianacademy.com/aboutus.htm>

Palmetto Scholars Academy

<http://www.palmettoscholarsacademy.org/>

St. John Catholic Church

<http://www.saintjohncatholicsc.org/churchsite/masterplan.php>

South Carolina Department of Employment and Workforce

<http://dew.sc.gov>

Labor Market Information: <https://jobs.scworks.org/analyzer/default.asp>

South Carolina Office of Revenue and Fiscal Affairs

http://www.sccommunityprofiles.org/pop_projections.php

US Department of Agriculture

<https://apps.ams.usda.gov/fooddeserts/foodDeserts.aspx>

US Census Bureau

<http://www.census.gov>

Appendix A

Public Involvement Summaries

- BCDOG Meeting Summary – May 7, 2014
- LAMC Meeting Summary – May 7, 2014
- Metanoia Meeting Summary – May 7, 2014
- North Charleston meeting Summary – May 7, 2014
- Park Circle Neighborhood Meeting Summary – August 13, 2014
- Union Heights Neighborhood Meeting Summary – August 12, 2014
- Hunley Water Neighborhood Meeting Summary – February 1, 2016
- Marinex Construction / Salmons Dredging Meeting – February 16, 2016

Meeting notes

Project:	Navy Base ICTF, North Charleston, SC		
Subject:	Local interview with Berkeley-Charleston-Dorchester Council of Governments (BCDCOG)		
Date and time:	May 7, 2014, 1:00pm	Meeting no:	
Meeting place:	BCDCOG Office	Minutes by:	Darren Even and Jenny Noonkester
Present:	Kathryn Basha Nick Pergakes Nat Ball Jenny Noonkester Darren Even	Representing:	BCDCOG BCDCOG USACE Atkins Atkins

Nat Ball with the US Army Corps of Engineers (USACE) provided an overview of the proposed project and identified a comparable facility located in Ohio. It was suggested that obtaining a video of this facility would be helpful for public involvement to aid in residents visualizing the proposed facility.

BCDCOG staff noted that there has been no significant new development in the project study area; only a small residential subdivision. It is the opinion of BCDCOG staff that population loss in the area has halted since 2010.

Nick Pergakes will provide additional information about the Low Country Alliance for Model Communities (LAMC) and the Mitigation Agreement Commission (MAC).

The former Navy Hospital site is poised for redevelopment. According to the Neck Area Plan, this site is viewed as a major catalyst site for the area and could include provisions for Bus Rapid Transit. The Charleston Area Regional Transportation Authority (CARTA) is building an intermodal facility at the Amtrak Station located west of the study area.

As the proposed project advances, the BCDCOG identified that a potential mitigation measure would be to look into small business assistance.

In the Neck Area Plan, the port area was envisioned to be more of a Research and Development district with employment and less of a residential area.

BCDCOG mentioned that it would be good to speak with MAC Board members (such as Michael Brown and Robert Kennedy), and Randy Cook with the SC Department of Health and Environmental Control (DHEC). Michelle Mapp with the SC Housing Trust would also be a helpful resource.

Nick Pergakes will send past MAC Meeting Minutes to Atkins team members.

BCDCOG would like to see an adaptive reuse of the former Chicora Elementary School and noted that gentrification was a major concern of neighborhoods during development of the Neck Area Plan.

The bike lanes on Spruill Avenue are relatively new. There is a bicycle/pedestrian component in the Neck Area Plan. Charleston County Parks and Recreation may have a greenway planned under I-26 down to Charleston. A greenway extension may also be planned all the way along Spruill Avenue. Contact Julie Hensley – Charleston County has a new master plan. Also, Park South is located in the southern part of the study area.

There is some debate about whether Spruill Avenue should be a freight/industrial corridor or a commercial/residential corridor.

There is very high unemployment in the study area. As a result, there is concern regarding local jobs and possible training centers. Nick can send economic data from Business Analyst.

Rivers Avenue corridor is highest for transit activity and there is some transit activity on Spruill Avenue.

There are plans to relocate seamen's chapel (currently on the Clemson project site) to a nearby park. There is an historic district over barracks area on the River Center project site.

When asked about any flooding issues, BCDCOG noted that Charleston County has a hazard mitigation plan.

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
1	Data Request – Send Atkins team members information on LAMC, MAC, MAC meeting minutes, and any other relevant documents.	Complete	Nick Pergakes

Meeting notes

Project:	Charleston ICTF		
Subject:	Local Interviews		
Date and time:	May 7, 2014	Meeting no:	1
Meeting place:	LAMC Office	Minutes by:	Atkins
Present:	Herb Fraser Rahim Omar Muhammad Nat Ball Jenny Noonkester Darren Even	Representing:	LAMC LAMC USACE Atkins Atkins

Lowcountry Alliance for Model Communities (LAMC) has a good relationship with EPA-NEPA and EJ in Region IV. They are helping to review studies conducted by LAMC.

Cumulative impacts of the proposed project in addition to the Port EIS are a concern.

LAMC discussed the previous mitigation agreement that included long-term monitoring for PM 2.5. They established 3 local monitors through a grant and are making this data accessible to the public (www.ejradar.org). The LAMC building is part of the mitigation agreement. Omar will send the actual soils data collected when it is published at the end of the summer.

There are plans for the Stromboli Avenue corridor in the LAMC Revitalization Plan. This plan addresses economic development, affordable housing, education, and the environment. Many people in the area are not gainfully employed, sometimes because they have a criminal record (often “soft crimes”).

The Mitigation Agreement Commission (MAC) consists of 17 members, but only a core group shows up for meetings. There is a 3-party agreement between the Ports Authority, LAMC, and the City of North Charleston. The mitigation money has also been with the City and well accounted for. As of December 2013, the City wants out of the 3-party agreement. LAMC had a contract with a consultant for a feasibility study for the Maritime Training Center (part of the mitigation agreement), but the City did not award the contract.

LAMC was started to address drug problems in Union Heights, Chicora/Cherokee, Acabee, Five Mile, and Liberty Hill. Then they started to look at larger issues. LAMC worked to negotiate the mitigation agreement and they now cover an expanded area to the south. They also now have Charleston Community Research to Action Board (CCRAB), a 501(c) organization to address environmental issues. CCRAB also researches proposed rezoning and makes recommendations.

They are working on the second part of a NIH grant to evaluate the health of residents (hospital records, etc.). They would like to see a Health Impact Assessment for the project. They understand it's not required for NEPA, but it is a concern. Nat noted that for air quality they are doing dispersion modeling and density mapping – looking for hot spots.

Herb noted that there was a change in the Union Heights community when they defeated the incinerator. It brought them together and made them feel like they could make a difference.

On the mapping, they noted there is a mosque in Union Heights. They also noted the 3 neighborhood community centers. LAMC would like a hard copy of the DEIS for the community to review. They noted that venues other than libraries may be better for public review locations. They suggested Metanoia office or community centers. They also suggested looking at the new Chicora School site to add a new recreation center (to replace Sterett Hall).

Meeting notes

Project:	Charleston ICTF		
Subject:	Community Interviews		
Date and time:	May 7, 2014, 9:00am	Meeting no:	1
Meeting place:	2005 Reynolds Ave	Minutes by:	Atkins
Present:	Rev. Bill Stanfield Nat Ball Jenny Noonkester Darren Even	Representing:	Metanoia USACE Atkins Atkins

Metanoia is a local community development corporation focused on youth leadership, housing and economic development in the Chicora/Cherokee neighborhood. Rev. Bill Stanfield is the CEO of Metanoia.

Metanoia has redeveloped five properties near the project area, between Spruill Avenue and North Carolina Avenue. Three are located on Success Street, one on Leland Street, and one on Grayson Street.

Concerns with the proposed project include:

- Loss of Sterett Hall recreation center – many people in the community use this facility. How will it be replaced? Palmetto Railways owns Sterett Hall, but the City of North Charleston operates facility. Facility is open to the public. There are offices for the community in the building, as well as a gym and auditorium.
- There is also an Arts Incubator near Sterett Hall, located across from the former Academic Magnet School. Artists can rent studio space in this building through the N. Charleston Arts Department (Marty Besancon).
- Other concerns include noise, vibration, and pollution.
- Concerned that the most active tracks are next to the neighborhood. (Mr. Ball pointed out that these are actually the lead tracks that will have assembled trains. Trains will be assembled/loaded and the tracks further away from the neighborhood.)
- A noise wall is essential. A larger buffer is needed between the tracks and the neighborhood. They may prefer acquisition of a few rows of property adjacent to the tracks.
- They have concerns regarding the CSX rail line along Spruill. Will it open again? There was a deal between CSX and the City to abandon the rail line from the north. The line has not been active for years and the neighborhood does not want to see it reopen. There are numerous road crossings along the abandoned line and it would cause safety and noise issues.
- There are wetlands between North Carolina Avenue and the existing tank farm site (on the north side of Viaduct Road). There is concern about impacts to these wetlands.
- Changes in zoning (to more impactful development) are a major concern. Rev. Stanfield suggested that we look into the Port Overlay District.

Metanoia invests in the community to help them solve their own problems. They have been working in the community for 12 years. They just completed a housing survey to identify vacant lots and boarded up houses that may present opportunities for redevelopment. They are working with Clemson University on a master plan for Reynolds Avenue. They also worked to develop the community garden (located at North Carolina Ave/Spruill Ave split).

Rev. Stanfield has lived in the community since 2003 and noted that the area has become more stable and there is less crime. The schools are improving. He is worried that the project could undo everything that they are working to accomplish. However, he feels there are opportunities to make the project mutually

NOTE TO RECIPIENTS:

These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

beneficial. He has talked to an Environmental Justice (EJ) attorney for advice. Mr. Ball suggested he may want to talk with the EPA's EJ group.

Concern about the loss of access to St. John's Avenue (north of McMillan Ave) was noted. Mr. Ball mentioned that Palmetto Railways may be working on a master plan for the northern portion of the former Navy base.

Rev. Stanfield asked if we can quantify the opportunity cost of the project.

Bicycle/pedestrian connectivity is very important in the community. There has been a proposal to use the inactive rail corridor as a bike/ped path. Rev. Stanfield noted he thinks this was a proposal by the Speedwell Foundation (Michael Mesner).

The north side of Stromboli Avenue, west of the project area by the proposed Port Access Road, was identified as a redevelopment site in the LAMC master plan. This is also a critical area identified in the Northern Neck Area Master Plan. Metanoia generally supports the LAMC Revitalization Plan.

The former Chicora School site is owned by the City and is a redevelopment opportunity. This site could possibly be converted to senior housing or a job incubator. Rev. Stanfield identified the following sites as areas of focus to stabilize the area:

1. Reynolds Avenue corridor
2. Former Chicora Elementary School site
3. Site next to Military Magnet School

Rev. Stanfield noted that a software company (Omatic Software, owned by Jeff Montgomery) is now located where we have a Korean Church noted on our mapping (North Carolina Ave and Success St). He also noted that Crazy Dutchman catering (Reynolds Avenue) provides employment opportunities for the local community.

The new Chicora Elementary School and a new fire station (relocated from project site) will be built on the old tank farm site (near the corner of Rivers Ave and Clement Ave). Metanoia may look at doing some housing in this area if the site is clean.

Rev. Stanfield noted the importance of maintaining connections with the neighborhood to the south (Union Heights) because these areas may be starved if they are cut off from other communities. Also, maintaining connectivity between the neighborhoods and Riverfront Park is very important. This is the only access to the water for these neighborhoods. Rev. Stanfield remembered someone at an earlier meeting suggesting a pedestrian bridge to the park.

Meeting notes

Project:	Charleston ICTF		
Subject:	Local Interviews		
Date and time:	May 7, 2014	Meeting no:	1
Meeting place:	City of North Charleston	Minutes by:	Atkins
Present:	Eileen Duffy Jim Hutto Gwen Moultrie Ray Anderson Wannetta Mallette Nat Ball Jenny Noonkester Darren Even	Representing:	City of North Charleston City of North Charleston City of North Charleston City of North Charleston City of North Charleston USACE Atkins Atkins

Project team members asked City of North Charleston (City) staff to identify recent housing developments and/or planned developments in the study area since census data from 2000 to 2010 indicates a population loss. Staff identified new housing at Hunley Waters, located in the northern study area near the south bank of Noisette Creek. They also identified the construction of West Yard Lofts, an affordable housing complex developed for tax credits. Staff noted that there are approximately 200 empty lots in the Union Heights area and that the old Chicora Elementary building is under consideration to be converted to housing. City staff noted that they are working on a plan for a new neighborhood near River Front Park (Horizon Village, 150 to 300 housing units). Another plan in development mentioned by the City is a “rails to trails” plan that includes two park preserves as well as bicycle and pedestrian connections. Staff noted that this portion of the Noisette Master Plan is still being implemented.

City staff noted that some properties in the area have been rezoned from Planned Development District to M-1 (industrial). They noted a lawsuit that was filed by neighboring properties over the rezoning of the Continental Tire site (adjacent to West Yard Lofts). Covenants and restrictions are tied to the property. There are a large number of historic structures in the area (some are listed on the National Register of Historic Places).

There is recurring flooding in several areas due to improper drainage. It was suggested that a mitigation plan be prepared. City staff noted that the drainage onto the Navy Base hasn't been mapped. It was also noted that the City built wetlands to assist with drainage of the navy base site. Staff noted that water and sewer infrastructure on the navy base property was updated by the providers before the City would take ownership of the property.

Community resources located in the study area include:

- Sterett Hall – A recreation center with a 900-seat theater, classrooms for arts program, and a full gym. The removal of Sterett Hall will be the biggest loss to the community. Nearby buildings 89 (meeting room) and 658 (Arts Cultivation Center) are also used.
- Several ballfields are located near Sterett Hall along Hobson Avenue and are still used by the local community.
- The City is losing Fire Station #2 with no financial assistance from condemnation of the site.
- The City purchased an old mill to the north of the study area to house the arts program; however, there is no current funding for the major renovations that the building requires. The City estimates this cost to be \$15 to \$18 million. Staff mentioned that they are likely to pursue a Public-Private-Partnership (P3) to fund this renovation.

The City noted that they are trying to hold off Palmetto Railways from taking properties for as long as possible since the \$8 million dollars from the settlement agreement isn't enough to replace all of these facilities.

Regarding the proposed project, the City is concerned about access to the area. Will existing gates be opened? The City had planned for trucks to use McMillian Avenue, Cosgrove Avenue, and Viaduct Road. Seems Cosgrove Avenue would be the best alternative with an overpass and want this to be aesthetically pleasing. Staff suggested that Cosgrove Avenue be realigned to the south side of the powerhouse and would like to keep Viaduct Road open as it provides access to FLETC (Federal Law Enforcement Training Center), Clemson Restoration Institute, etc. Staff is also worried that money would be shifted to improvements to Cosgrove Avenue only. Access to the yard should be aesthetically pleasing for the surrounding neighborhoods.

Times of operation are a concern. Parking for trucks when the gates close at 5:00 PM need to be identified and provided. Maybe a truck parking lot could be provided neat the rail yard. Hobson Avenue can't handle additional traffic as it is built on fill and is settling. A preliminary study for truck traffic on I-526 was initiated by the City with a draft document completed, but the study process was stopped due to a lawsuit. The study identified some adverse effects in the project area. Eileen Duffy will forward a copy of this document to Atkins team members.

The impact to road connectivity is a concern due to trains that currently block S. Rhett (north of Noisette Creek) for hours, and sometimes block Spruill Avenue (mostly on weekends). This hurts street connectivity and could get worse if CSX gets a new loop or proposed second rail line on the north side of Noisette Creek along Virginia Avenue (south side of Park Circle). A second rail line on Virginia will be a concern to Park Circle residents. Is there any way to notify and re-route emergency service vehicles in the event of trains blocking roads? Sometimes you may get blocked by trains at 3 different crossings – every way you try to go. The latest technology should be used to move the trains through efficiently.

Other concerns noted by the City are potential impacts from noise, vibration, and air quality. Quality of life issues for area residents were identified as a concern.

City staff stated that technically, the state doesn't need the property to be rezoned, but leased property would be under City regulations. It was mentioned that SCPR initially wanted to clear the whole site and treat it as a greenfield for industrial, but they can't do that due to historic structures and various outparcels not owned by SCPR.

The City mentioned that LAMC does not represent the Chicora-Cherokee neighborhood and that project team members should meet with AJ Davis, the neighborhood president. LAMC has turned over control of mitigation funds to the Mitigation Agreement Commission (MAC).

City staff member Wanetta Mallette is concerned that the study area is too small. The indirect effects, loss of use, displacement, and loss of property values should be included in the study.

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
Traffic	Send 2011 draft Truck Route study to Atkins team members.	Completed on 5-7-14	Eileen Duffy

Meeting notes

Project:	Navy Base ICTF, North Charleston, SC		
Subject:	Park Circle Area Neighborhood Meeting		
Date and time:	August 13, 2014, 6:00pm	Meeting no:	
Meeting place:	Olde North Charleston Community Building	Minutes by:	Jenny Noonkester and Julie Hussey
Present:	Nat Ball Jenny Noonkester Julie Hussey	Representing:	USACE Atkins Civic Communications

This was a combined meeting of Olde North Charleston, Palmetto Gardens, Cameron Terrace, and North East Park Circle. There were approximately 25 people in attendance. The ICTF was the only item of discussion.

The following is a summary of the comments that were made at the meeting:

- People wanted to know right away how Park Circle would be impacted. They questioned why the whole neighborhood wasn't shown on the map.
- How long will the trains be?
- Some people were happy to see a grade separation proposed at Cosgrove/McMillan, but others questioned why they couldn't get a bridge in Park Circle. Residents would like to see a bridge at Montague, North Rhett, or Virginia. Then need a "means of escape" when blocked by trains. People noted that you can get trapped on Montague if there's a train on Mixson and Virginia.
- People noted that if this is Palmetto Railways first big project, they should be careful to get it right.
- People were concerned that the project may undermine some of the major upgrades that have been made in the area.
- They were concerned about impacts to the neighborhoods around the project. Councilman Bob King said that Palmetto Railways would have to buy all the property east of North Carolina Avenue in the Chicora-Cherokee neighborhood because "social justice won't let them do that."
- People are concerned about the noise. Trains are noisy when they move, and they make more noise as they load and unload. People also complained about the number and length of horn blows. They noted one engineer that blows his horn excessively.
- People are concerned about roads being blocked by trains. They need to get to work and need to have clear roads to get there.
- Councilman Bob King noted his desire to have both the rail lines (CSX and NS) turn to the left to the main line. He said another track can be added next to the CSX right of way since the City owns that land anyway.
- Some residents feel they don't have an advocate for their neighborhoods, like the southern neighborhoods have. They feel the Department of Commerce is "sneaky."
- Many people expressed concern about using the old trestle across the marsh.
- Councilman Bob King had a copy of the Settlement Agreement and pointed out to Nat that it calls for a surface transportation study. Nat noted that the agreement is between the City and Palmetto Railways. Mr. King questioned if the agencies work together.

- One man noted multiple recent rail incidents in the area and wondered if these are being considered. Nat noted that federal regulations are in place to ensure safety of the railroads.
- People questioned whether a quiet zone could be established. Some nights it is hard to sleep due to the train noise.
- One resident noted after the meeting that the new at-grade crossing by the Icehouse (near Aragon and Spruill) will block people that live in the northwest quadrant of that intersection. There would be no way to get around to go south on Spruill without hitting an at-grade crossing. We also talked with Jeff Montgomery, owner of Omatic Software. He moved his offices to the NE corner of Success and North Carolina and has a nice building and has improved the property. He is very concerned how this project will impact his property and is wary of making any new improvements.

Meeting notes

Project:	Navy Base ICTF, North Charleston, SC		
Subject:	Union Heights Neighborhood Meeting		
Date and time:	August 12, 2014, 6:00pm	Meeting no:	
Meeting place:	Gethsemani Community Center	Minutes by:	Jenny Noonkester and Julie Hussey
Present:	Nat Ball Jenny Noonkester Julie Hussey	Representing:	USACE Atkins Civic Communications

We attended their regularly scheduled neighborhood meeting, so we listened to the other items on the agenda before we came up at the end. There were approximately 10-12 people in attendance.

In his update to the neighbourhood, Omar Muhammad talked about the Charleston County Research to Action Board (CCRAB) and how they have developed an Environmental Justice Radar Tool where residents can upload information about their area. They just received a grant (from EPA?) to train 75 community members on the use of the tool. He also mentioned that they are working on 2 grant proposals: 1) air quality monitoring in homes and personal monitors for area residents (through the University of Maryland in partnership with the University of SC) and 2) an NIH grant to collect urine and blood samples from community residents. Omar also mentioned all the soil testing they had done in the area and that all 200 samples exceeded EPA's residential grading. (He previously provided this data to the project team.)

For our discussion, Nat placed our boards on the table and gave some background information on the Navy Base Intermodal Facility. The following comments were noted:

- There was a lot of interest in the Port Access Road.
- Residents noted that they don't have the resources to adapt to changes the way the Port does. They also noted they haven't been getting on updates on the status of the Port expansion project.
- Residents feel they don't have a say. They can't stand in the way of progress.
- People noted concerns about impacts to their property value. Also feel that the tiered interchange for the Port Access Road could hurt property values.
- They were told in 2005 that there would be no rail, and now they feel that rail was on the table the whole time.
- Residents noted that their seniors should not feel like they have to move out of the neighborhood. The seniors feel like the City has written them off. And young people are not moving back into the neighborhood.
- Residents noted issues with the delay time caused by trains when they are stuck on the track. They already experience long delays and detours. This could get worse. They also noted that they already live with noise and "house-shaking" from trains.
- There was concern about how tall the containers will be stacked and whether they will be visible from the neighborhood (visual impacts).
- People asked if there was anything we could do about the existing noise from Cooper Yard. They have no idea what they are doing in Cooper Yard.
- They want to know if the rail companies can be good neighbors.

- There were concerns about what is in the containers that will be moving through (near) the neighborhoods. What if there is a spill?
- They noted plans to use the old tank farm site to knit the communities back together.
- There is a feeling that the southern neighborhoods have been neglected by the City since the Navy Base was closed, even though they were the ones that bore the burdens.
- Several people wanted to make clear that they understand and support business but they wanted those businesses to be respectful of their neighborhoods. We learned that Union Heights has been a historically African American neighborhood throughout its history. The name Union Heights refers to the Union soldiers who stayed there during the Civil War.

Meeting notes

Project:	Navy Base ICTF, North Charleston, SC		
Subject:	Hunley Waters Neighborhood Meeting		
Date and time:	February 1, 2016 6:30pm	Meeting no:	
Meeting place:	Hunley Waters Neighborhood	Minutes by:	Darren Even
Present:	Richard Darden, Ph. D. Julie Hussey Darren Even	Representing:	USACE Civic Communications Atkins

Project team members met the Hunley Waters Neighborhood Association. The meeting format started with Richard Darden with the US Army Corps of Engineers (USACE) providing an overview of the proposed project and then turning into a question and answer session.

Questions raised by residents are documented and answers are provided if known by the team members in attendance.

Q: Are the rail lines proposed parallel tracks, for example one set for each direction? What will the effects be?

Q: Why can't the trains run straight across Virginia Avenue?

A: Trains are estimated to be 10,000 feet long. Going straight across Virginia Avenue does not provide enough space for trains of this length.

Q: How far are the existing tracks from the Hunley Waters Neighborhood?

A: The group's consensus was a quarter mile.

Q: How will the historic resources associated with the Navy Base historic district be affected?

Comment: Palmetto Scholars Academy has moved to its new location.

Comment: The proximity of these trains to the neighborhood is a safety concern.

Q: Why have the Spruill Avenue options changed since the last public meetings?

A: The Spruill Avenue options have been determined to not be feasible due to both the CSX and Norfolk Southern rail companies having to share a single track and the length of this alignment is too short. The length of the track is a concern as the limited track does not allow enough time for trains to slow down and could throw boxes off the trains.

Q: When is the draft EIS expected for public review?

A: Late April 2016.

Q: This is a community effects project. What have the impacts been to other communities near projects similar to the ICTF project?

A: Transportation projects have traditionally resulted in community fragmentation due to lack of access points across the facility. The EIS is looking at a number of potential impacts relating to noise, vibration, air quality, wetlands, water quality, relocations, etc.

NOTE TO RECIPIENTS:

These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom.

Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

Q: The City of North Charleston has plans to construct a greenway/boardwalk along Noiset Creek from the band shell in Riverfront Park to Rivers Avenue. Currently, the piers for the Hunley Waters neighborhood boat dock are sinking due to recent pile driving for bridge reconstruction in the area. What will the vibration of the trains do to the boardwalk piers and our boat dock?

A: The project team will raise this concern with the noise and vibration analysis expert and ask how vibration is analyzed and its potential effect to buildings.

Comment: Air quality is a concern.

Q: What about the economic impact? What will all these trains do to the value our homes? The train horns are already out of control.

A: Quiet Zones could be implemented to reduce the need for trains to signal their horns.

Q: Is it true that there are train horns designed to only be audible if a person is awake? Studies already show that there is a negative effect to people's health from constant train noise.

Q: How are quiet zones enforced? Will having one crossing as a quiet zone be effective if the adjacent ones are not?

Q: Who is Palmetto Railways?

A: Palmetto Railways is a division of the South Carolina Department of Commerce.

Q: Why wasn't the ICTF thought of before the Port improvements were approved?

A: The Port has independent utility. As a stand-alone project, the primary issues caused by the port would be to the local road network and highway.

Richard noted that voluntary cleanup is currently taking place in the project terminal area regardless of project. This cleanup would be required for any proposed use of the former navy base property.

Q: Regardless of the wetland, this project creates a community impact why doesn't that trigger an EIS?

A: As a private entity, Palmetto Railways is not subject to the NEPA. However, a permit application decision by the Corps of Engineers constitutes a federal action subject to compliance with NEPA. On this basis, the Corps has chosen to prepare an EIS as its NEPA compliance document.

Comment: O'Hear Street Bridge recently replaced.

Q: What is the weight of the trains? Are there weight limits?

Q: The trains horns are the worst in the hours between midnight and 4:00am, how would our neighborhood go about requesting a sound barrier?

Q: What is the advantage of a 10,000 foot train over two trains that are 5,000 feet long?

Q: The homes by Riverfront Park will be cut off from the rest of the community by these trains. What will these trains do to walkability in the area?

- Comment: Existing road infrastructure from Main Street South is not adequate in North Charleston.
- Comment: The community will not see any money from this project.
- Comment: In the original plan, St. Johns Avenue was a dead end, so this new plan is a little better with the street open.
- Q: What about the spur rail line around the hospital?
- Comment: In general, this project is the wrong use of land.
- Comment: Residents were just starting to feel good about all of the recent improvements in the neighborhood and are concerned that the proposed project will set back all of the positive progress.
- Comment: This is the wrong time for this project.
- Q: What if the permit is denied?
- A: Following review of the permit application, the Corps must take one of three actions: 1) issue the permit as requested, 2) issue the permit requested, but with special conditions, 3) deny the permit. If denied, the project applicant would have to the option of submitting a revised permit application to the USACE that would propose a project similar to the least damaging practicable alternative (to the aquatic environment) identified in the permit decision document.
- Q: How can we review the EIS? Review copies will be available on the project website, at publicly accessible locations like libraries, and on CDs to be made available to our mailing list.
- Q: How can we comment? Comments can be mailed or emailed to Richard Darden, or can be made via the project website.
- A: Definitely reach out to the Federal Railroad Administration (FRA). The FRA team member for this project is John Winkle. This response was provided to a question about who represents the federal railroad agency.

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
1	Direct Hunley Waters homeowners association to information on railroad "Quiet Zones"	Complete	Julie Hussey

Meeting notes

Project:	Navy Base ICTF, North Charleston, SC		
Subject:	Marinex Construction / Salmons Dredging Meeting		
Date and time:	Feb 16, 2016	Meeting no:	
Meeting place:	Marinex Construction Offices 1903 Pittsburgh Avenue Charleston, SC 29405	Minutes by:	Richard Darden
Present:	Richard Darden, Ph. D Nat Ball F. Hammond Johnson Richard W. Salmons, Jr Will Spielnagel	Representing:	USACE USACE Marinex Construction, Inc. Salmons Dredging Salmons Dredging

This meeting was held as part of public involvement efforts associated with preparation of the Draft EIS for the proposed Palmetto Railways ICTF project. The two businesses listed above are located on the Cooper River at Pittsburgh Avenue and Cherry Hill Lane in Charleston. Both owners were concerned about the September 2015 project revision which resulted in the southern connection. Their comments during the meeting focused on the current and future access to and from their businesses in the context of train schedules and intersection blockages at Pittsburgh Avenue and Cherry Hill Lane. Both businesses operate industrial construction and dredging operations from their equipment yards at these locations. As such, they have concerns about their daily access to the city road system when trains are blocking the rail crossings. Specific concerns include access in and out for routine business travel, and especially regarding safety related access for emergency vehicles in the event of accidents or injuries that require medical attention. Given the nature of employee duties in an active industrial equipment yard, the business owners expressed concerns about employee safety and how train blockages are likely to negatively affect that safety.

Importantly, both business owners suggested that alternate access could be provided by constructing a frontage road along the east side of the existing railway tracks. This frontage road could connect to Herbert Street (to the south) and allow traffic in and out of their area when the existing and/or proposed tracks are blocked. The Corps was made aware that these businesses have discussed their concerns with Palmetto Railways and expects the discussions to continue.

Next meeting:

Distribution:

Date issued:

File ref:

NOTE TO RECIPIENTS:

These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

Appendix B

Census Demographic Tables

- Table B-1: Population Trends 2000-2010
- Table B-2: Future Population Estimates
- Table B-3: Age Distribution
- Table B-4: Race
- Table B-5: Hispanic or Latino Origin
- Table B-6: Limited English Proficiency
- Table B-7: Education Attainment for Persons Age 25 and Older
- Table B-8: Median Household Income in the Past 12 Months
- Table B-9: Household Income in the Past 12 Months
- Table B-10: Travel Time to Work
- Table B-11: Means of Transportation to Work
- Table B-12: Environmental Justice Analysis
- Table B-13: Housing Trends 2000-2010
- Table B-14: Year Housing Units Built
- Table B-15: Median House Value
- Table B-16: Occupancy Status of Housing Units
- Table B-17: Vehicle Availability by Occupied Housing Units

Appendix B – Census Tables

Population Characteristics

Table B-1: Population Trends 2000-2010

2010 Census Geography ¹	2000	2010	Difference	Percent Change 2000 to 2010	
				Overall	Annualized
CT 35, BG 1	1,142	1,103	-39	-3.4%	-0.3%
CT 35, BG 2	1,276	1,160	-116	-9.1%	-0.9%
CT 36, BG 1	671	621	-50	-7.5%	-0.8%
CT 36, BG 2	1,205	1,149	-56	-4.6%	-0.5%
CT 36, BG 3	919	463	-456	-49.6%	-6.6%
CT 37, BG 1	1,128	1,106	-22	-2.0%	-0.2%
CT 37, BG 2	2,539	1,903	-636	-25.0%	-2.8%
CT 37, BG 3	420	374	-46	-11.0%	-1.2%
CT 43, BG 1	485	439	-46	-9.5%	-1.0%
CT 43, BG 2	667	555	-112	-16.8%	-1.8%
CT 43, BG 3	972	721	-251	-25.8%	-2.9%
CT 43, BG 4	1,070	827	-243	-22.7%	-2.5%
CT 54, BG 1	861	709	-152	-17.7%	-1.9%
CT 54, BG 2	840	862	22	2.6%	0.3%
CT 55, BG 1	1,251	538	-713	-57.0%	-8.1%
CT 55, BG 2	802	706	-96	-12.0%	-1.3%
DSA	16,248	13,236	-3,012	-18.5%	-2.0%
North Charleston	79,641	97,471	17,830	22.4%	2.0%
Charleston	96,650	120,083	23,433	24.2%	2.2%
Charleston County	309,969	350,209	40,240	13.0%	1.2%
South Carolina	4,012,012	4,625,364	613,352	15.3%	1.4%

Source: US Census Bureau, Census 2010 and Census 2000, Summary File 1 100% Data, Table P1 and P001 "Total Population"

1. Several block groups changed boundaries, were merged, or the geographic identity numbers were reassigned between Census 2000 and 2010.

Note: CT = Census Tract, BG = Block Group. Shaded cells indicate block groups with notable population loss of 25 percent or greater.

Table B-2: Future Population Estimates

Geography	2010 Census	July 2020			July 2030		
	Actual	Estimate	Percent Change 2010-2020		Estimate	Percent Change 2020-2030	
			Overall	Annualized		Overall	Annualized
Charleston County	350,209	370,900	5.9%	0.6%	396,700	7.0%	0.7%
South Carolina	4,625,364	5,020,800	8.5%	0.8%	5,451,700	8.6%	0.8%

Source: US Census 2010 and SC Revenue and Fiscal Affairs Office (Formerly Budget and Control Board)

Table B-3: Age Distribution

2010 Census Geography	Total Population	Under 18		18 to 21		22 to 29		30 to 39		40 to 49		50 to 64		65 and Over	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
CT 35, BG 1	1,103	192	17.4%	40	3.6%	153	13.9%	202	18.3%	134	12.1%	228	20.7%	154	14.0%
CT 35, BG 2	1,160	161	13.9%	25	2.2%	151	13.0%	165	14.2%	155	13.4%	230	19.8%	273	23.5%
CT 36, BG 1	621	123	19.8%	32	5.2%	102	16.4%	118	19.0%	90	14.5%	117	18.8%	39	6.3%
CT 36, BG 2	1,149	226	19.7%	63	5.5%	155	13.5%	166	14.4%	177	15.4%	223	19.4%	139	12.1%
CT 36, BG 3	463	71	15.3%	20	4.3%	56	12.1%	74	16.0%	59	12.7%	120	25.9%	63	13.6%
CT 37, BG 1	1,106	224	20.3%	74	6.7%	136	12.3%	126	11.4%	156	14.1%	266	24.1%	124	11.2%
CT 37, BG 2	1,903	722	37.9%	151	7.9%	327	17.2%	200	10.5%	200	10.5%	231	12.1%	72	3.8%
CT 37, BG 3	374	91	24.3%	24	6.4%	55	14.7%	54	14.4%	50	13.4%	78	20.9%	22	5.9%
CT 43, BG 1	439	128	29.2%	33	7.5%	37	8.4%	48	10.9%	80	18.2%	82	18.7%	31	7.1%
CT 43, BG 2	555	144	25.9%	43	7.7%	86	15.5%	56	10.1%	96	17.3%	99	17.8%	31	5.6%
CT 43, BG 3	721	167	23.2%	43	6.0%	67	9.3%	63	8.7%	128	17.8%	166	23.0%	87	12.1%
CT 43, BG 4	827	177	21.4%	48	5.8%	94	11.4%	80	9.7%	113	13.7%	199	24.1%	116	14.0%
CT 54, BG 1	709	155	21.9%	45	6.3%	79	11.1%	60	8.5%	71	10.0%	183	25.8%	116	16.4%
CT 54, BG 2	862	478	55.5%	73	8.5%	142	16.5%	63	7.3%	48	5.6%	40	4.6%	18	2.1%
CT 55, BG 1	538	104	19.3%	21	3.9%	61	11.3%	65	12.1%	94	17.5%	147	27.3%	46	8.6%
CT 55, BG 2	706	141	20.0%	56	7.9%	90	12.7%	86	12.2%	105	14.9%	178	25.2%	50	7.1%
DSA	13,236	3,304	25.0%	791	6.0%	1,791	13.5%	1,626	12.3%	1,756	13.3%	2,587	19.5%	1,381	10.4%
North Charleston	97,471	24,831	25.5%	6,945	7.1%	15,765	16.2%	13,896	14.3%	12,705	13.0%	15,117	15.5%	8,212	8.4%
Charleston	120,083	21,651	18.0%	11,939	9.9%	21,462	17.9%	16,471	13.7%	13,603	11.3%	20,257	16.9%	14,700	12.2%
Charleston County	350,209	72,658	20.7%	23,896	6.8%	50,003	14.3%	46,347	13.2%	45,532	13.0%	67,052	19.1%	44,721	12.8%

Source: US Census Bureau, Census 2010, Summary File 1 100%, Table P12, "Sex by Age"

Note: Shaded cells identify block groups where the percentage of the population in that particular age group exceeds the county percentage by more than ten percentage points.

Table B-4: Race

2010 Census Geography	Total Population	White		Black or African American		American Indian and Alaska Native		Asian		Native Hawaiian and Other Pacific Islander		Other		Two or More Races	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
CT 35, BG 1	1,103	806	73.1%	239	21.7%	11	1.0%	5	0.5%	0	0.0%	33	3.0%	9	0.8%
CT 35, BG 2	1,160	966	83.3%	163	14.1%	1	0.1%	4	0.3%	0	0.0%	13	1.1%	13	1.1%
CT 36, BG 1	621	296	47.7%	277	44.6%	3	0.5%	9	1.4%	0	0.0%	21	3.4%	15	2.4%
CT 36, BG 2	1,149	541	47.1%	530	46.1%	13	1.1%	9	0.8%	4	0.3%	12	1.0%	40	3.5%
CT 36, BG 3	463	262	56.6%	189	40.8%	2	0.4%	1	0.2%	0	0.0%	2	0.4%	7	1.5%
CT 37, BG 1	1,106	266	24.1%	757	68.4%	10	0.9%	14	1.3%	0	0.0%	46	4.2%	13	1.2%
CT 37, BG 2	1,903	154	8.1%	1629	85.6%	6	0.3%	28	1.5%	3	0.2%	38	2.0%	45	2.4%
CT 37, BG 3	374	45	12.0%	307	82.1%	0	0.0%	8	2.1%	0	0.0%	1	0.3%	13	3.5%
CT 43, BG 1	439	18	4.1%	415	94.5%	1	0.2%	2	0.5%	0	0.0%	1	0.2%	2	0.5%
CT 43, BG 2	555	24	4.3%	509	91.7%	0	0.0%	0	0.0%	0	0.0%	18	3.2%	4	0.7%
CT 43, BG 3	721	56	7.8%	659	91.4%	1	0.1%	0	0.0%	0	0.0%	2	0.3%	3	0.4%
CT 43, BG 4	827	82	9.9%	682	82.5%	7	0.8%	5	0.6%	0	0.0%	34	4.1%	17	2.1%
CT 54, BG 1	709	15	2.1%	680	95.9%	1	0.1%	1	0.1%	0	0.0%	1	0.1%	11	1.6%
CT 54, BG 2	862	10	1.2%	840	97.4%	1	0.1%	0	0.0%	0	0.0%	0	0.0%	11	1.3%
CT 55, BG 1	538	98	18.2%	398	74.0%	5	0.9%	10	1.9%	1	0.2%	7	1.3%	19	3.5%
CT 55, BG 2	706	86	12.2%	604	85.6%	3	0.4%	3	0.4%	0	0.0%	2	0.3%	8	1.1%
DSA	13,236	3,725	28.1%	8,878	67.1%	65	0.5%	99	0.7%	8	0.1%	231	1.7%	230	1.7%
North Charleston	97,471	40,514	41.6%	45,964	47.2%	453	0.5%	1,897	1.9%	157	0.2%	6,067	6.2%	2,419	2.5%
Charleston	120,083	84,258	70.2%	30,491	25.4%	271	0.2%	1,971	1.6%	122	0.1%	1,205	1.0%	1,765	1.5%
Charleston County	350,209	224,910	64.2%	104,239	29.8%	1,068	0.3%	4,719	1.3%	299	0.1%	9,477	2.7%	5,497	1.6%

Source: US Census Bureau, Census 2010, Summary File 1 100% Data, Table P3 "Race"

NOTE: Shaded cells indicate block groups where the percentage of the population in that minority racial group exceeds 50 percent.

Table B-5: Hispanic or Latino Origin

2010 Census Geography	Total Population	Hispanic		Not Hispanic	
		#	%	#	%
CT 35, BG 1	1,103	61	5.5%	1,042	94.5%
CT 35, BG 2	1,160	37	3.2%	1,123	96.8%
CT 36, BG 1	621	40	6.4%	581	93.6%
CT 36, BG 2	1,149	54	4.7%	1,095	95.3%
CT 36, BG 3	463	5	1.1%	458	98.9%
CT 37, BG 1	1,106	80	7.2%	1,026	92.8%
CT 37, BG 2	1,903	89	4.7%	1,814	95.3%
CT 37, BG 3	374	8	2.1%	366	97.9%
CT 43, BG 1	439	5	1.1%	434	98.9%
CT 43, BG 2	555	22	4.0%	533	96.0%
CT 43, BG 3	721	15	2.1%	706	97.9%
CT 43, BG 4	827	67	8.1%	760	91.9%
CT 54, BG 1	709	4	0.6%	705	99.4%
CT 54, BG 2	862	1	0.1%	861	99.9%
CT 55, BG 1	538	20	3.7%	518	96.3%
CT 55, BG 2	706	23	3.3%	683	96.7%
DSA	13,236	531	4.0%	12,705	96.0%
North Charleston	97,471	10,617	10.9%	86,854	89.1%
Charleston	120,083	3,451	2.9%	116,632	97.1%
Charleston County	350,209	18,877	5.4%	331,332	94.6%

Source: US Census Bureau, Census 2010, Summary File 1 100% Data, Table P4
 "Hispanic or Latino Origin"

Note: Hispanic or Latino is an ethnic category and can include persons of any race; therefore, the Hispanic or Latino percentages are presented exclusive of race.

Table B-6: Limited English Proficiency

2010 Census Geography		Total Adult Population	Primary Language Group of Persons Who Speak English Less than Very Well							
			Spanish		Other Indo-Euro		Asian/Pacific Island		Other	
Census Tract	Block Group		#	%	#	%	#	%	#	%
35	1	917	51	5.6%	0	0.0%	0	0.0%	0	0.0%
	2	866	1	0.1%	0	0.0%	19	2.2%	0	0.0%
36	1	555	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	2	1,156	69	6.0%	0	0.0%	35	3.0%	8	0.7%
	3	468	0	0.0%	0	0.0%	0	0.0%	0	0.0%
37	1	866	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	2	865	16	1.8%	5	0.6%	11	1.3%	0	0.0%
	3	301	0	0.0%	0	0.0%	0	0.0%	0	0.0%
43	1	229	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	2	445	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	3	695	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	4	664	0	0.0%	0	0.0%	0	0.0%	8	1.2%
54	1	627	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	2	260	0	0.0%	0	0.0%	0	0.0%	0	0.0%
55	1	388	17	4.4%	0	0.0%	0	0.0%	0	0.0%
	2	569	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Study Area		9,871	154	1.6%	5	0.1%	65	0.7%	16	0.2%
North Charleston		75,188	4,344	5.8%	226	0.3%	785	1.0%	69	0.1%
Charleston		99,979	547	0.5%	391	0.4%	494	0.5%	161	0.2%
Charleston County		284,861	6,098	2.1%	823	0.3%	1,547	0.5%	218	0.1%
South Carolina		3,600,525	83,991	2.3%	13,059	0.4%	15,848	0.4%	2,703	0.1%

Source: US Census Bureau, American Community Survey 5-Year Estimates (2009-2013), Table B16004, "Age by Language Spoken at Home for the Population 5+ Years"

NOTE: Shaded cells indicate block groups with 50 or more persons in an LEP language group.

Table B-7: Educational Attainment for Persons Age 25 and Older

2010 Census Geography		Population Age 25 and Older	Not a High School Graduate		High School Graduate or GED Alternative		Some College		College Graduate (Associate's Degree or Higher)	
Census Tract	Block Group		#	%	#	%	#	%	#	%
35	1	819	73	8.9%	185	22.6%	323	39.4%	238	29.1%
	2	730	43	5.9%	205	28.1%	188	25.8%	294	40.3%
36	1	437	0	0.0%	85	19.5%	225	51.5%	127	29.1%
	2	1,043	229	22.0%	324	31.1%	266	25.5%	224	21.5%
	3	397	99	24.9%	82	20.7%	26	6.5%	190	47.9%
37	1	726	213	29.3%	212	29.2%	186	25.6%	115	15.8%
	2	530	237	44.7%	127	24.0%	121	22.8%	45	8.5%
	3	262	127	48.5%	62	23.7%	28	10.7%	45	17.2%
43	1	229	112	48.9%	57	24.9%	42	18.3%	18	7.9%
	2	369	111	30.1%	207	56.1%	32	8.7%	19	5.1%
	3	588	301	51.2%	129	21.9%	114	19.4%	44	7.5%
	4	540	152	28.1%	252	46.7%	108	20.0%	28	5.2%
54	1	571	182	31.9%	266	46.6%	61	10.7%	62	10.9%
	2	210	65	31.0%	99	47.1%	21	10.0%	25	11.9%
55	1	309	96	31.1%	129	41.7%	68	22.0%	16	5.2%
	2	474	127	26.8%	146	30.8%	119	25.1%	82	17.3%
Study Area		8,234	2,167	26.3%	2,567	31.2%	1,928	23.4%	1,572	19.1%
North Charleston		62,236	12,647	20.3%	18,214	29.3%	14,344	23.0%	17,031	27.4%
Charleston		80,882	6,018	7.4%	14,467	17.9%	15,498	19.2%	44,899	55.5%
Charleston County		243,560	28,451	11.7%	51,872	21.3%	49,046	20.1%	114,191	46.9%
South Carolina		3,118,029	481,983	15.5%	933,232	29.9%	651,510	20.9%	1,051,304	33.7%

Source: US Census Bureau, American Community Survey 5-Year Estimates (2009-2013), Table B15003 "Educational Attainment for the Population 25 Years and Over"

Note: Shaded cells identify individual block groups where the percentage of the population that did not complete high school is 25 percentage points greater than the county.

Economic Characteristics

Table B-8: Median Household Income in the Past 12 Months

2010 Census Geography		Income in the past 12 months (in 2013 inflation adjusted dollars)
Census Tract	Block Group	
35	1	\$44,861
	2	\$35,526
36	1	\$46,953
	2	\$25,368
	3	\$70,500
37	1	\$18,064
	2	\$16,454
	3	\$38,625
43	1	\$12,031
	2	\$18,393
	3	\$17,143
	4	\$19,550
54	1	\$21,139
	2	\$6,263
55	1	\$15,147
	2	\$11,875
Study Area		NA
North Charleston		\$39,322
Charleston		\$51,737
Charleston County		\$50,792
South Carolina		\$44,779

Source: US Census Bureau, American Community Survey, 5-Year Estimates (2009-2013), Table B19013

Table B-9: Household Income In the Past 12 Months

2010 Census Geography		Total Households	Number of Households by Household Income in the Past 12 Months							
Census Tract	Block Group		Less than \$24,999	\$25,000 to \$49,999	\$50,000 to \$74,999	\$75,000 to \$99,999	\$100,000 to \$124,999	\$125,000 to \$149,999	\$150,000 to \$199,999	\$200,000 or More
35	1	514	130	168	78	68	54	16	0	0
	2	452	137	133	62	44	52	8	9	7
36	1	241	69	55	76	0	3	0	30	8
	2	671	333	166	91	19	45	9	8	0
	3	186	45	18	54	20	8	6	35	0
37	1	531	384	84	27	0	0	25	11	0
	2	561	433	100	15	13	0	0	0	0
	3	164	51	62	23	0	6	18	4	0
43	1	140	97	8	35	0	0	0	0	0
	2	262	172	71	19	0	0	0	0	0
	3	320	229	66	0	25	0	0	0	0
	4	359	195	79	48	37	0	0	0	0
54	1	315	183	85	32	6	5	0	4	0
	2	250	218	19	13	0	0	0	0	0
55	1	142	110	20	12	0	0	0	0	0
	2	359	265	32	52	7	0	3	0	0
Study Area		5,467	3,051	1,166	637	239	173	85	101	15
North Charleston		36,384	11,886	10,019	6,950	3,490	2,247	676	710	406
Charleston		51,591	13,356	11,714	8,418	6,358	3,885	2,389	2,418	3,053
Charleston County		143,717	37,091	33,794	25,119	16,131	10,944	6,282	7,045	7,311
South Carolina		1,780,251	504,119	470,017	321,440	198,097	119,668	64,173	56,280	46,457

Source: US Census, American Community Survey 5-Year Estimates (2009-2013), Table B19001.

Table B-10: Low-Income Households

2010 Census Geography		Total Households	Number of Households by Household Income in the Past 12 Months				Low Income Households	
Census Tract	Block Group		Less than \$10,000	\$10,000 to \$14,999	\$15,000 to \$19,999	\$20,000 to \$24,999	Subtotal	% of Total
35	1	514	23	75	0	32	130	25.3%
	2	452	18	0	72	47	137	30.3%
36	1	241	0	25	44	0	69	28.6%
	2	671	223	52	29	29	333	49.6%
	3	186	0	38	7	0	45	24.2%
37	1	531	124	44	161	55	384	72.3%
	2	561	130	122	81	100	433	77.2%
	3	164	14	0	32	5	51	31.1%
43	1	140	31	48	0	18	97	69.3%
	2	262	53	20	76	23	172	65.6%
	3	320	101	41	42	45	229	71.6%
	4	359	91	46	47	11	195	54.3%
54	1	315	54	73	10	46	183	58.1%
	2	250	186	0	15	17	218	87.2%
55	1	142	33	37	40	0	110	77.5%
	2	359	148	79	34	4	265	73.8%
Study Area		5,467	1,229	700	690	432	3,051	55.8%
North Charleston		36,384	3,810	2,696	2,695	2,685	11,886	32.7%
Charleston		51,591	5,724	2,717	2,757	2,158	13,356	25.9%
Charleston County		143,717	13,410	7,815	8,051	7,815	37,091	25.8%
South Carolina		1,780,251	163,030	116,039	114,375	110,675	504,119	

Source: US Census, American Community Survey 5-Year Estimates (2009-2013), Table B19001. "Household Income in the Past 12 Months"

Note: The HHS 2014 Poverty Threshold for FY2014 is \$23,850 for a household of 4-Persons. This amount falls within the ACS income range of \$20,000 and \$24,999. As a result, all households in that income range are included in the estimate of low-income households. Shaded cells indicate block groups where 50% or more of the households are low-income.

Table B-11: Travel Time to Work

2010 Census Geography		Total	Less Than 10 Minutes		10 to 19 Minutes		20 to 29 Minutes		30 to 59 Minutes		60 or Minutes	
Census Tract	Block Group		#	%	#	%	#	%	#	%	#	%
35	1	497	28	5.6%	266	53.5%	93	18.7%	110	22.1%	0	0.0%
	2	491	51	10.4%	340	69.2%	47	9.6%	42	8.6%	11	2.2%
36	1	351	75	21.4%	115	32.8%	101	28.8%	60	17.1%	0	0.0%
	2	562	71	12.6%	281	50.0%	109	19.4%	101	18.0%	0	0.0%
	3	409	83	20.3%	150	36.7%	115	28.1%	55	13.4%	6	1.5%
37	1	423	25	5.9%	141	33.3%	188	44.4%	63	14.9%	6	1.4%
	2	512	16	3.1%	317	61.9%	120	23.4%	59	11.5%	0	0.0%
	3	139	40	28.8%	49	35.3%	9	6.5%	21	15.1%	20	14.4%
43	1	114	16	14.0%	29	25.4%	26	22.8%	43	37.7%	0	0.0%
	2	200	22	11.0%	50	25.0%	55	27.5%	55	27.5%	18	9.0%
	3	234	15	6.4%	9	3.8%	68	29.1%	85	36.3%	57	24.4%
	4	328	0	0.0%	116	35.4%	124	37.8%	80	24.4%	8	2.4%
54	1	229	59	25.8%	61	26.6%	38	16.6%	63	27.5%	8	3.5%
	2	191	0	0.0%	89	46.6%	37	19.4%	57	29.8%	8	4.2%
55	1	150	27	18.0%	46	30.7%	45	30.0%	16	10.7%	16	10.7%
	2	220	15	6.8%	84	38.2%	76	34.5%	35	15.9%	10	4.5%
Study Area		5,050	543	10.8%	2,143	42.4%	1,251	24.8%	945	18.7%	168	3.3%
North Charleston		44,837	4,755	10.6%	15,662	34.9%	12,352	27.5%	10,421	23.2%	1,647	3.7%
Charleston		59,752	8,275	13.8%	21,440	35.9%	16,290	27.3%	11,481	19.2%	2,266	3.8%
Charleston County		164,366	19,019	11.6%	54,734	33.3%	44,544	27.1%	39,980	24.3%	6,089	3.7%
South Carolina		1,922,427	254,775	13.3%	621,020	32.3%	440,955	22.9%	504,463	26.2%	101,214	5.3%

Source: US Census Bureau, American Community Survey 5-Year Estimates (2009-2013), Table B08303 "Travel Time to Work"

Table B-12: MEANS OF TRANSPORTATION TO WORK

2010 Census Geography		Total	Drove Alone		Carpooled		Public transportation (excluding taxicab):		Taxicab, Motorcycle, Bicycle or Other Means		Walked		Work At Home	
Census Tract	Block Group		#	%	#	%	#	%	#	%	#	%	#	%
35	1	548	448	81.8%	21	3.8%	0	0.0%	10	1.8%	18	3.3%	51	9.3%
	2	492	344	69.9%	107	21.7%	10	2.0%	30	6.1%	0	0.0%	1	0.2%
36	1	361	334	92.5%	17	4.7%	0	0.0%	0	0.0%	0	0.0%	10	2.8%
	2	562	464	82.6%	44	7.8%	9	1.6%	45	8.0%	0	0.0%	0	0.0%
	3	422	339	80.3%	14	3.3%	30	7.1%	26	6.2%	0	0.0%	13	3.1%
37	1	437	212	48.5%	132	30.2%	50	11.4%	0	0.0%	29	6.6%	14	3.2%
	2	512	305	59.6%	129	25.2%	47	9.2%	15	2.9%	16	3.1%	0	0.0%
	3	158	74	46.8%	33	20.9%	32	20.3%	0	0.0%	0	0.0%	19	12.0%
43	1	114	81	71.1%	25	21.9%	0	0.0%	0	0.0%	8	7.0%	0	0.0%
	2	200	79	39.5%	10	5.0%	99	49.5%	0	0.0%	12	6.0%	0	0.0%
	3	234	173	73.9%	0	0.0%	52	22.2%	0	0.0%	9	3.8%	0	0.0%
	4	338	157	46.4%	84	24.9%	79	23.4%	0	0.0%	8	2.4%	10	3.0%
54	1	250	150	60.0%	54	21.6%	0	0.0%	25	10.0%	0	0.0%	21	8.4%
	2	191	89	46.6%	36	18.8%	32	16.8%	18	9.4%	16	8.4%	0	0.0%
55	1	167	63	37.7%	36	21.6%	25	15.0%	0	0.0%	26	15.6%	17	10.2%
	2	226	149	65.9%	26	11.5%	38	16.8%	0	0.0%	7	3.1%	6	2.7%
Study Area		5,212	3,461	66.4%	768	14.7%	503	9.7%	169	3.2%	149	2.9%	162	3.1%
North Charleston		45,841	34,911	76.2%	6,588	14.4%	1,512	3.3%	994	2.2%	832	1.8%	1,004	2.2%
Charleston		62,471	48,008	76.8%	4,297	6.9%	1,769	2.8%	2,428	3.9%	3,250	5.2%	2,719	4.4%
Charleston County		172,101	135,991	79.0%	15,434	9.0%	3,592	2.1%	4,167	2.4%	5,182	3.0%	7,735	4.5%
South Carolina		1,994,198	1,649,097	82.7%	188,896	9.5%	11,605	0.6%	31,359	1.6%	41,470	2.1%	71,771	3.6%

Source: US Census Bureau, American Community Survey 5-Year Estimates (2009-2013), Table B08301 "Means of Transportation to Work"

Note: Shaded cells identify block groups where the percentage of persons using a particular mode of transportation is 10 percentage points or more than the county percentage.

Table B-13: Environmental Justice Analysis

2010 Census Geography		Total Population	Total Minority Population ¹	Percentage Minority Population	Threshold for EJ Status for Minority Population Met? ²	Total Households	Low-Income Households	Percentage of Low-Income Households	Threshold for EJ Status for Low-Income Population Met? ²
Census Tract	Block Group								
35	1	1,103	255	23.1%	No	514	130	25.3%	No
	2	1,160	168	14.5%	No	452	137	30.3%	No
36	1	621	289	46.5%	No	241	69	28.6%	No
	2	1,149	556	48.4%	No	671	333	49.6%	No
	3	463	192	41.5%	No	186	45	24.2%	No
37	1	1,106	781	70.6%	Yes	531	384	72.3%	Yes
	2	1,903	1,666	87.5%	Yes	561	433	77.2%	Yes
	3	374	315	84.2%	Yes	164	51	31.1%	No
43	1	439	418	95.2%	Yes	140	97	69.3%	Yes
	2	555	509	91.7%	Yes	262	172	65.6%	Yes
	3	721	660	91.5%	Yes	320	229	71.6%	Yes
	4	827	694	83.9%	Yes	359	195	54.3%	Yes
54	1	709	682	96.2%	Yes	315	183	58.1%	Yes
	2	862	841	97.6%	Yes	250	218	87.2%	Yes
55	1	538	414	77.0%	Yes	142	110	77.5%	Yes
	2	706	610	86.4%	Yes	359	265	73.8%	Yes
Study Area		13,236	9,050	68.4%	Yes	5,467	3,051	55.8%	Yes
North Charleston		97,471	48,471	49.7%		36,384	11,886	32.7%	
Charleston		120,083	32,855	27.4%		51,591	13,356	25.9%	
Charleston County		350,209	110,325	31.5%		143,717	37,091	25.8%	

Source: US Census Bureau, Census 2010, Summary File 1 100% Data, Table P3 "Race", American Community Survey 5-Year Estimates (2009-2013), Table C17002 "Ratio of Income to Poverty Level in the Past 12 Months"

1. Per CEQ guidance, the total minority population is comprised of the following population groups: American Indian or Alaskan Native; Asian; Pacific Islander; Black, not of Hispanic origin; and Hispanic or Latino. However, the U.S. Census recognizes Hispanic or Latino as an ethnic category that can include persons of any race. As a result, the Hispanic or Latino population is presented exclusive of race in Table 3.16-5. As identified in Table 3.16-5, the Hispanic or Latino population of the study area does not meet CEQ guidance criteria in identifying environmental justice populations.

2. CEQ guidance identifies the presence of minority or low-income populations when the percentage of the population group exceeds 50 percent.

Housing Characteristics

Table B-14: Housing Trends 2000-2010

2010 Census Geography ¹	2000	2010	Difference	Percent Change 2000 to 2010	
				Overall	Annualized
CT 35, BG 1	537	543	6	1.1%	0.1%
CT 35, BG 2	595	596	1	0.2%	0.0%
CT 36, BG 1	369	355	-14	-3.8%	-0.4%
CT 36, BG 2	609	588	-21	-3.4%	-0.4%
CT 36, BG 3	495	231	-264	-53.3%	-7.3%
CT 37, BG 1	557	542	-15	-2.7%	-0.3%
CT 37, BG 2	1,097	874	-223	-20.3%	-2.2%
CT 37, BG 3	268	248	-20	-7.5%	-0.8%
CT 43, BG 1	256	206	-50	-19.5%	-2.1%
CT 43, BG 2	335	309	-26	-7.8%	-0.8%
CT 43, BG 3	416	357	-59	-14.2%	-1.5%
CT 43, BG 4	486	414	-72	-14.8%	-1.6%
CT 54, BG 1	464	335	-129	-27.8%	-3.2%
CT 54, BG 2	298	278	-20	-6.7%	-0.7%
CT 55, BG 1	301	257	-44	-14.6%	-1.6%
CT 55, BG 2	310	302	-8	-2.6%	-0.3%
DSA	7,393	6,435	-958	-13.0%	-1.4%
North Charleston	33,631	42,219	8,588	25.5%	2.3%
Charleston	44,563	59,522	14,959	33.6%	2.9%
Charleston County	141,031	169,984	28,953	20.5%	1.9%

Source: US Census Bureau, Census 2010 and Census 2000, Summary File 1 100% Data, Table H1 and H001 "Housing Units"

1. Several block groups changed boundaries, were merged, or the geographic identity numbers were reassigned between Census 2000 and 2010.

Note: CT = Census Tract, BG = Block Group. Shaded cells indicate block groups with notable housing unit loss of 25 percent or greater.

Table B-15: Year Housing Units Built

2010 Census Geography		Total Housing Units	Built 2010 or Later		Built 2000 to 2009		Built 1970 to 1999		Built 1969 or Earlier	
Census Tract	Block Group		#	%	#	%	#	%	#	%
35	1	570	0	0.0%	17	3.0%	23	4.0%	530	93.0%
	2	565	0	0.0%	17	3.0%	37	6.5%	511	90.4%
36	1	326	0	0.0%	30	9.2%	103	31.6%	193	59.2%
	2	682	0	0.0%	0	0.0%	280	41.1%	402	58.9%
	3	213	0	0.0%	0	0.0%	6	2.8%	207	97.2%
37	1	689	0	0.0%	77	11.2%	181	26.3%	431	62.6%
	2	739	0	0.0%	263	35.6%	120	16.2%	356	48.2%
	3	293	18	6.1%	60	20.5%	118	40.3%	97	33.1%
43	1	193	0	0.0%	7	3.6%	31	16.1%	155	80.3%
	2	302	0	0.0%	20	6.6%	61	20.2%	221	73.2%
	3	404	0	0.0%	29	7.2%	55	13.6%	320	79.2%
	4	485	0	0.0%	29	6.0%	167	34.4%	289	59.6%
54	1	362	0	0.0%	6	1.7%	77	21.3%	279	77.1%
	2	332	0	0.0%	54	16.3%	179	53.9%	99	29.8%
55	1	177	44	24.9%	0	0.0%	40	22.6%	93	52.5%
	2	393	20	5.1%	0	0.0%	80	20.4%	293	74.6%
Study Area		6,725	82	1.2%	609	9.1%	1,558	23.2%	4,476	66.6%
North Charleston		42,656	397	0.9%	12,340	28.9%	17,476	41.0%	12,443	29.2%
Charleston		59,283	559	0.9%	14,673	24.8%	22,386	37.8%	21,665	36.5%
Charleston County		171,625	1,220	0.7%	36,320	21.2%	81,690	47.6%	52,395	30.5%
South Carolina		2,143,464	18,086	0.8%	445,807	20.8%	1,138,412	53.1%	541,159	25.2%

Source: US Census Bureau, American Community Survey, 5-Year Estimates (2009-2013), Table B25034 "Year Structure Built"

Table B-16: Median House Value

2010 Census Geography		Value
Census Tract	Block Group	
35	1	\$138,100
	2	\$172,000
36	1	\$226,700
	2	\$144,700
	3	\$146,300
37	1	\$88,500
	2 ¹	- N -
	3	\$159,400
43	1 ¹	- N -
	2 ¹	- N -
	3	\$61,300
	4	\$62,900
54	1	\$66,900
	2 ¹	- N -
55	1 ¹	- N -
	2	\$212,500
Study Area		NA
North Charleston		\$138,300
Charleston		\$253,800
Charleston County		\$236,100
South Carolina		\$137,400

Source: US Census Bureau, American Community Survey, 5-Year Estimates (2009-2013), Table B25077

1. There is not enough sample data in this block group to calculate a median house value.

Table B-17: Occupancy Status of Housing Units

2010 Census Geography		Total Housing Units	Owner Occupied		Renter Occupied		Vacant	
			#	%	#	%	#	%
Census Tract	Block Group							
35	1	543	345	63.5%	160	29.5%	38	7.0%
	2	596	440	73.8%	107	18.0%	49	8.2%
36	1	355	88	24.8%	208	58.6%	59	16.6%
	2	588	229	38.9%	294	50.0%	65	11.1%
	3	231	128	55.4%	77	33.3%	26	11.3%
37	1	542	185	34.1%	278	51.3%	79	14.6%
	2	874	32	3.7%	702	80.3%	140	16.0%
	3	248	21	8.5%	130	52.4%	97	39.1%
43	1	206	15	7.3%	156	75.7%	35	17.0%
	2	309	27	8.7%	210	68.0%	72	23.3%
	3	357	63	17.6%	230	64.4%	64	17.9%
	4	414	125	30.2%	210	50.7%	79	19.1%
54	1	335	134	40.0%	133	39.7%	68	20.3%
	2	278	4	1.4%	269	96.8%	5	1.8%
55	1	257	36	14.0%	175	68.1%	46	17.9%
	2	302	73	24.2%	189	62.6%	40	13.2%
DSA		6,435	1,945	30.2%	3,528	54.8%	962	14.9%
North Charleston		42,219	17,673	41.9%	19,242	45.6%	5,304	12.6%
Charleston		59,522	27,288	45.8%	25,053	42.1%	7,181	12.1%
Charleston County		169,984	87,068	51.2%	57,241	33.7%	25,675	15.1%

Source: US Census Bureau, Census 2010, Tables H1 "Household Units", H3 "Occupancy Status" and H4 "Tenure"

Note: Shaded cells identify block groups where the percentage of renter occupied homes is more than 10 percentage points higher than the county percentage.

Table B-18: Vehicle Availability by Occupied Housing Units

2010 Census Geography		Total	No Vehicle Available	
Census Tract	Block Group		#	%
35	1	514	23	4.5%
	2	452	73	16.2%
36	1	241	0	0.0%
	2	671	79	11.8%
	3	186	0	0.0%
37	1	531	174	32.8%
	2	561	142	25.3%
	3	164	27	16.5%
43	1	140	68	48.6%
	2	262	150	57.3%
	3	320	123	38.4%
	4	359	154	42.9%
54	1	315	77	24.4%
	2	250	175	70.0%
55	1	142	75	52.8%
	2	359	158	44.0%
Study Area		5,467	1,498	27.4%
North Charleston		36,384	4,127	11.3%
Charleston		51,591	5,196	10.1%
Charleston County		143,717	12,242	8.5%
South Carolina		1,780,251	123,997	7.0%

Source: US Census Bureau, American Community Survey 5-Year Estimates (2009-2013), Table B25044 "Tenure by Vehicles Available"

Note: Cells shaded in grey identify block groups where the percentage of housing units with no vehicle is 10 percentage points or more than the county percentage.

Appendix C

Settlement Agreement

STATE OF SOUTH CAROLINA
COUNTY OF CHARLESTON

IN THE COURT OF COMMON PLEAS
NINTH JUDICIAL CIRCUIT

City of North Charleston,
Plaintiff/Landowner in Fact,

vs.
South Carolina Department of Commerce,
Division of Public Railways,
Defendant/Condemnor.

and
Clemson University,
Landowner in Title,

(Tract 11)

**SETTLEMENT AGREEMENT
AND RELEASE**

CIVIL ACTION NO. 2011-CP-10-491

City of North Charleston,
Plaintiff/Landowner,

vs.
South Carolina Department of Commerce,
Division of Public Railways,
Defendant/Condemnor.

(Tract 12)

CIVIL ACTION NO. 2011-CP-10-492

City of North Charleston,
Plaintiff/Landowner,
vs.
South Carolina Department of Commerce,
Division of Public Railways,
Defendant/Condemnor.

(Tract 13A)

CIVIL ACTION NO. 2011-CP-10-493

City of North Charleston,
Plaintiff/Landowner,
vs.
South Carolina Department of Commerce,
Division of Public Railways,
Defendant/Condemnor.

(Tract 13B)

CIVIL ACTION NO. 2011-CP-10-494

City of North Charleston,
Plaintiff,
vs.
S.C. Ports Authority, S.C. Department of
Commerce, S.C. Department of Commerce,
Division of Public Railways, State of South
Carolina,
Defendants.

CIVIL ACTION NO. 2011-CP-10-5550

North Charleston Sewer District,
Plaintiff/Landowner
vs.
South Carolina Department of Commerce,
Division of Public Railways,
Defendant/Condemnor.

(Tract 18)

CIVIL ACTION NO. 2011-CP-10-3147

THIS SETTLEMENT AGREEMENT ("Agreement") is hereby made and entered into by and between the **SOUTH CAROLINA DEPARTMENT OF COMMERCE** ("Commerce") and its **DIVISION OF PUBLIC RAILWAYS** ("Public Railways"), the **CITY OF NORTH CHARLESTON** ("City"), and the **NORTH CHARLESTON SEWER DISTRICT** ("Sewer District"), collectively the "Parties." As set forth herein, the effective date of this Agreement ("Effective Date") will be the date on which a Consent Order is entered adopting and incorporating these terms.

WITNESSETH:

WHEREAS, the Parties acknowledge and agree that the efficient, cost-effective movement of goods to and from the Port of Charleston is of vital importance to the City of North Charleston, the greater Charleston region, and the State of South Carolina; and

WHEREAS, the Parties further acknowledge and agree that construction and implementation of an equal, dual access intermodal container transfer facility ("ICTF") is an essential component to the efficient and cost-effective accommodation of the rapid growth in commerce anticipated after the Panama Canal is widened in 2014; and

WHEREAS, Commerce, Public Railways, and the City have evaluated various possible alternatives to identify a feasible location for the ICTF; and

WHEREAS, the Parties agree that the ICTF must be located where the adverse impacts of the ICTF can best be minimized so as to reduce such impacts on the citizens of North Charleston and the surrounding region; and

WHEREAS, Commerce and Public Railways have concluded, after thorough review of the various related issues over a significant period of time, that the only feasible site for the ICTF is on and in the vicinity of the property identified in the condemnation action captioned *South Carolina Department of Commerce, Division of Public Railways, Condemnor v. Clemson University, Landowner*, Civil Action No. 2010-CP-10-10495 (Tract 11); and

WHEREAS, the Parties now desire to resolve all disputes among them that are the subject of various actions as set forth in more detail herein and move forward with a plan to construct the ICTF while taking such steps as are necessary to minimize and resolve existing and anticipated issues with the transportation infrastructure in and around the City of North Charleston.

NOW, THEREFORE, FOR AND IN CONSIDERATION of the mutual promises and covenants contained herein and for other valuable consideration, the receipt, adequacy and sufficiency of which is hereby acknowledged, the Parties agree as follows:

I. FINANCIAL TERMS

A. Cash Compensation to City

Public Railways will pay \$8 million to the City over four (4) years as mitigation for rail access impacts. The first payment of \$2 million will be made no later than 30 days after the Effective Date. Thereafter, \$2

million dollar payments will be made no later than the anniversary date of the first payment in 2014, 2015, and 2016.

B. Assumption of TIF Bonds

The Parties recognize that the City previously created a Tax Increment Financing ("TIF") District for the Navy Base Redevelopment Project area, which is approximately 1,520 acres in size. As of June 30, 2012, there was approximately \$6,500,000 in outstanding TIF obligations, and Public Railways will assume responsibility for payment of this debt.

II. REAL PROPERTY MATTERS

A. Public Railways Transfers to City

Public Railways acknowledges and agrees that it will be responsible for any reasonable costs associated with Public Railways' transfer of title to the below-referenced properties for nominal consideration, and that the City will incur no costs in these transfers.

1. Officer Housing Area

Public Railways will transfer to the City by quit claim deed title to the acreage adjacent to the City's Waterfront Park commonly referred to as the "Officer Housing Area," but Public Railways will retain such portion of that property required to straighten the S Curve [herein, "Tract 1-C"], as explained in Section II.C.2.a. The Officer Housing Area is depicted as Tract 1-A and Tract 1-B, and the portion thereon being retained by Public Railways for the S Curve is depicted as Tract 1-C, on Exhibit A, attached hereto and incorporated herein by reference. The Officer Housing Area is comprised of the major portion of TMS No. 400-00-00-044 [herein, "Tract 1-A"], (less such portion required to straighten the S Curve [Tract 1-C]), and a strip of land located adjacent to the northern side of TMS No. 400-00-00-044, constituting a minor portion of TMS No. 400-00-00-048 [herein, "Tract 1-B"]. All TMS Nos. referenced herein and hereinafter will refer to tax map sheet numbers on file at the office of the Charleston County Tax Assessor. Public Railways hereby reserves, and will also reserve in the quit claim deed a perpetual, non-exclusive right of ingress, egress and access, over all roadways located on the within described property; provided, however, that the City has the unilateral right, in its sole discretion, to relocate any existing roadway so long as said relocation is on City property and does not create any new grade crossings and continues to provide Public Railways with sufficient ingress, egress, and access to Public Railways' property until such time as a relocated roadway becomes public. Transfer of title to the Officer Housing Area will occur as soon as is practicable after the Effective Date.

2. North Acreage—Present Transfer

Public Railways will transfer to the City by quit claim deed title to a portion of the former Capmark Property located north of Noisette Creek ("North Acreage"). The specific North Acreage to be transferred in the near future is approximately 7.785 acres comprised of the following two tracts of land: (a) a tract containing approximately 6.487 acres with TMS No. 400-00-00-065 [herein, "Tract 2-A"]; and (b) a tract containing approximately 1.298 acres with TMS No. 400-00-00-086 [herein, "Tract 2-B"], both being more fully shown on Exhibit A attached hereto and incorporated herein by reference. Public Railways hereby reserves, and will also reserve in the quit claim deed, a perpetual, non-exclusive right of ingress, egress and access, over all roadways located on the within described property; provided, however, that the City has the unilateral right, in its sole discretion, to relocate any existing roadway so long as said relocation is on City property and does not create any new grade crossings and continues to provide Public

Railways with sufficient ingress, egress, and access to Public Railways' property until such time as a relocated roadway becomes public. Transfer of title to these parcels will occur as soon as is practicable after the Effective Date.

3. North Acreage—2017 Transfer

Public Railways will transfer to the City by quit claim deed title to the following portions of the North Acreage:

- (a) Parcel A, which is comprised of approximately 7.300 acres with TMS No. 400-00-00-047 and depicted as Tract 3-A [herein, "Tract 3-A"];
- (b) The residual portion of Parcel B, being the major portion of Parcel 1B, with TMS No. 400-00-00-109 and depicted as Tract 3-B [herein, "Tract 3-B"]; and
- (c) Portions of North "B" Avenue and North Second Street with TMS No. 400-00-00-072, depicted as Tract 3-C [herein, "Tract 3-C"],

all of which are shown as Tract 3-A, Tract 3-B and Tract 3-C on Exhibit A, attached hereto and incorporated herein by reference. Public Railways hereby reserves, and will also reserve in the quit claim deed(s), a perpetual, non-exclusive right of ingress, egress and access, over all roadways located on the within described property; provided, however, that the City has the unilateral right, in its sole discretion, to relocate any existing roadway so long as said relocation is on City property and does not create any new grade crossings and continues to provide Public Railways with sufficient ingress, egress, and access to Public Railways' property until such time as a relocated roadway becomes public. The transfers of Tract 3-A, Tract 3-B and Tract 3-C will occur no later than December 31, 2017.

B. City Transfers to Public Railways

Public Railways acknowledges and agrees that Public Railways will be responsible for any reasonable costs associated with the City's transfer of title to the below-referenced properties for nominal consideration, and that the City will incur no costs in these transfers.

1. DFAS Property

No later than December 31, 2017, the City will transfer by quit claim deed to Public Railways the City's entire interest in the DFAS property, known as Lot G, containing approximately 11.27 acres, having TMS No. 400-00-00-060, and depicted as Tract 4 [herein, "Tract 4"] on Exhibit A, attached hereto and incorporated herein by reference. The City will also provide further information concerning any potential interest of any entity associated, connected or related to the Noisette Company, LLC in the DFAS property as soon as is practicable after the Effective Date.

2. Crane Maintenance Building

No later than December 31, 2017, the City will transfer by quit claim deed to Public Railways the City's entire interest in the Crane Maintenance Building, identified as Parcel A, containing approximately 2.76 acres, with TMS No. 400-00-00-181, and depicted as Tract 5 [herein, "Tract 5"] on Exhibit A, attached hereto and incorporated herein by reference.

3. Powerhouse

The City will transfer by quit claim deed to Public Railways the City's entire interest in the Powerhouse property [herein, the "Powerhouse property"], if Public Railways desires to accept title to the Powerhouse property. The City will provide to Public Railways a due diligence period that expires on March 31, 2013, to assess potential liabilities associated with a transfer of the Powerhouse property, identified as Lot A, containing approximately 2.25 acres, with TMS No. 400-00-00-142 and depicted as Tract 6 [herein, "Tract 6"] on Exhibit A, attached hereto and incorporated herein by reference. If Public Railways elects by or before March 31, 2013 to accept the transfer of the Powerhouse property, the City will transfer by quit claim deed title to such property no later than 30 days after written notification of acceptance by Public Railways.

4. Park South

The City shall transfer by quit claim deed to Public Railways the City's entire interest in the Park South property [herein, the "Park South property"] hereinafter described, if Public Railway desires to accept title to the Park South property. The City will provide to Public Railways a due diligence period that expires on March 31, 2013, to determine whether the transfer of the City's interest in the Park South property to Public Railways can be implemented without adverse financial impact to either party. The Park South property is the approximately 9.323 acres of land located on the northeastern side of Spruill Avenue, south of Naval Base Road, known as the Park South Recreational Facility, more fully shown on plat prepared by Andrew Gillette, SCRLS, of Stantec Consulting Services, Inc., dated March 3, 2009, and recorded in the office of the Register of Mesne Conveyances for Charleston County, in Plat Book L-09 at page 0112, having TMS No. 466-04-00-013, and shown as Tract 7 [herein, "Tract 7"] on Exhibit B attached hereto and incorporated herein by reference. If financial impacts are acceptable to both Parties and Public Railways accepts transfer of the City's interest in the Park South property by or before March 31, 2013, the City will transfer by quit claim deed the City's entire interest in such property no later than 30 days after written notification of acceptance by Public Railways.

5. Howard Heights

The City shall transfer by quit claim deed to Public Railways the City's entire interest in the Howard Heights property [herein, the "Howard Heights property"] hereinafter described, if Public Railway desires to accept title to the Howard Heights property. The City will provide to Public Railways a due diligence period that expires on March 31, 2013, to assess potential liabilities associated with a transfer of the Howard Heights property. The Howard Heights property is comprised of Lots 10, 11, 12, 23, 24, 27 and 28 as shown on a map of Howard Heights by Joseph Needle, C.E., dated May 1, 1943 and recorded in the office of the Register of Mesne Conveyances for Charleston County, in Plat Book F at page 155, having TMS Nos. 466-08-00-466, 466-08-00-467, 466-08-00-468, 466-08-00-477, 466-08-00-478, 466-08-00-481 and 466-08-00-482, respectively, and are shown as Tract 8-A, Tract 8-B, Tract 8-C, Tract 8-D, Tract 8-E, Tract 8-F and Tract 8-G [each being herein so called], on Exhibit B, attached hereto and incorporated herein by reference. If Public Railways elects by or before March 31, 2013 to accept the transfer of the Howard Heights property, the City will transfer by quit claim deed the City's entire interest in such property no later than 30 days after written notification of acceptance by Public Railways.

6. Other City Property Required for ICTF

The City will transfer such interest in additional properties and/or rights-of-way to Public Railways as is needed to implement the ICTF. These transfers, if any, will be without compensation, whether the City is the landowner or is named as an "Other Condemnee" in a condemnation proceeding, and includes only

those properties that may be needed to implement the Public Railways Rail Plan as generally envisioned at present, including, but not limited to, any additional City property that might be required as depicted on the current plan for the ICTF as shown on the Overall Project Layout Map dated July 26, 2012, a copy of which is attached as Exhibit C, attached hereto and incorporated herein by reference. In addition, the City will transfer the City's entire interest in any former Navy Base property on which existing railway lines and associated rights of way are located.

C. Other Issues

1. Control of Vacated Federal Properties

Should federal tenants vacate property on the former Navy Base in the area generally east of Noisetette Boulevard and generally north of Noisetette Creek, then the City shall be entitled to receive such properties. The City relinquishes any claim to property subsequently vacated by federal tenants located elsewhere on the former Navy Base.

2. Rezoning

City staff will support all reasonable rezoning, permitting, and other administrative approvals necessary for implementation of the ICTF and associated railway lines and roadways as well as any other activities required to facilitate the movement of cargo to and from the Port of Charleston. The City further agrees upon execution of this Agreement to take the following actions regarding the below referenced projects.

- a. S-Curve Realignment Project: A portion of Public Railways' rail line on the former Navy Base runs parallel to Noisetette Boulevard and is configured in an "S" shape. This portion of the rail line is known as the "S Curve" and is located within the City's municipal jurisdiction. Public Railways has developed plans to modify the curvature of the S Curve and has applied to the City to issue its MS4 approval of its Stormwater Pollution Prevention Plan and type II / III application in connection with its S Curve Realignment Project. The City agrees that it will approve this application and forward the City's approval to the South Carolina Department of Health and Environmental Control.
- b. Project Crescent: City staff, upon compliance by the owner/applicant with all statutory required procedures, will support the rezoning of Building 1079 and portions of the immediately adjacent acreage, designated as portions of Charleston County TMS No. 400-00-00-048 and 400-00-00-073 (the "Crescent Property"), to a heavy industrial zoning classification (or such other zoning and/or variances as necessary) prior to commencement of new investment by Project Crescent or its affiliates in the Crescent Property. The City also confirms that the Crescent Property has historically been used for storage and that such use is in accordance with the existing uses exception set forth in the Planned Development District for the Navy Yard at Noisetette.

III. OTHER ISSUES RELATED TO ICTF & NAVY BASE

A. Mitigation of Adverse Impacts

1. Surface Transportation Study

The City and Public Railways agree that they, along with the South Carolina Department of Transportation ("SCDOT") and the South Carolina State Ports Authority ("State Ports Authority"), will

enter into a written agreement to equally fund a comprehensive surface transportation study to identify impacts of rail and highway traffic related to state port and rail operations throughout North Charleston ("the Surface Transportation Study"), and they will further formulate methods and facilities for the mitigation and management of such impacts. The study will be performed jointly by Public Railways' Rail Engineering firm and the City's Rail Engineering firm, in conjunction with such other specialists they may require. Nothing in this Settlement Agreement will be construed to waive the City's claims against the State Ports Authority to the three overpasses referenced in the MOU between the City and State Ports Authority dated October 25, 2002 ("2002 MOU"). However, the City will reasonably consider alternatives to overpasses that the Surface Transportation Study may recommend.

2. Truck Routes

The Parties agree that the scope of the Surface Transportation Study set forth in the preceding paragraph will include optimal truck routes to and from the ICTF and that the Parties will make all reasonable efforts, including the adoption of effective, reasonable enforcement mechanisms, to implement the recommendations of the Surface Transportation Study.

3. Quiet Zones and Related Measures

The Parties agree to work together, and in collaboration with the Class I rail carriers, to implement quiet zones and other related measures, as recommended by the Surface Transportation Study, to mitigate the adverse impact of the ICTF at no cost to the City.

B. City Support of ICTF

1. Objections To Properties Subject To Condemnation

The City agrees to withdraw its objections and/or challenges to the condemnation actions initiated by Public Railways for the ICTF. More specifically, the City agrees to the entry of a Consent Order bilaterally dismissing with prejudice the following actions:

City of North Charleston v. South Carolina Department of Commerce, Division of Public Railways and Clemson University, Civil Action No. 2011-CP-10-491 (Tract 11);

City of North Charleston v. South Carolina Department of Commerce, Division of Public Railways, Civil Action No. 2011-CP-10-492 (Tract 12);

City of North Charleston v. South Carolina Department of Commerce, Division of Public Railways, Civil Action No. 2011-CP-10-493 (Tract 13A); and

City of North Charleston v. South Carolina Department of Commerce, Division of Public Railways, Civil Action No. 2011-CP-10-494 (Tract 13B).

In addition, the Sewer District agrees to the entry of a Consent Order dismissing with prejudice the following action:

North Charleston Sewer District v. South Carolina Department of Commerce, Division of Public Railways, Civil Action No. 2011-CP-10-3147 (Tract 18).

The City further agrees that it will initiate no further right to take challenge actions with regard to any future condemnation actions initiated by Public Railways in connection with its ICTF project as currently generally envisioned.

2. Objections To Northern Access

The City previously objected to Northern rail access for the ICTF and asserted that the 2002 MOU between the City and the State Ports Authority supported the City's position. The City now withdraws any objection to Northern rail access for the ICTF as depicted generally on the Overall Project Layout Map dated July 26, 2012, and recognizes that neither Commerce nor Public Railways was a party to the 2002 MOU, and because Commerce and Railways are not controlled by that document, the City will not assert in the future that the 2002 MOU is in any way binding on Public Railways or Commerce. However, the City specifically retains any rights it may have concerning the State Ports Authority with regard to the 2002 MOU. Finally, in *City of North Charleston v. State Ports Authority, South Carolina Department of Commerce, South Carolina Department of Commerce, Division of Public Railways, State of South Carolina*, Civil Action No. 2011-CP-10-5550, the City will consent to an Order bilaterally dismissing said action with prejudice as to Commerce, Public Railways, and State of South Carolina, but will only consent to an Order dismissing its claims against State Ports Authority without prejudice provided the State Ports Authority will act in a reciprocal manner.

3. Support of CSX ROW Transfer

The Parties acknowledge that the current plan for the ICTF as shown on the Overall Project Layout Map dated July 26, 2012, a copy of which is attached as Exhibit C, has railroad access for the ICTF north of McMillan Avenue roughly paralleling an unused section of right of way currently owned by CSX Transportation, Inc. ("CSX"). Public Railways has proposed acquiring ownership of the aforesaid CSX right of way, and the City will support the efforts by Public Railways to acquire this right of way at no cost to the City.

4. Permitting

The City, upon the request of Commerce and/or Public Railways, subject to its available resources, using its best efforts, and to the extent permitted by law, will assist Commerce and/or Public Railways in their timely filing of all applications for granting and renewing all applicable permits with federal, state, and local agencies. Such assistance by the City will include, to the extent permitted by law, facilitating the timely processing of all local, state, and federal permits,¹ as well as any approvals or certifications required in connection with the ICTF and related railway lines and roadways. The City understands that the goal of Commerce and Public Railways is to have such permits issued on an expedited basis in order to permit Public Railways to proceed with construction of the ICTF as soon as is practicable.

C. City Support of Economic Development

The City and Commerce desire to be full partners in economic development initiatives in the City and surrounding areas. To that end, the City will support any and all reasonable efforts by Commerce to attract new investment and jobs by administratively supporting all rezoning, permitting, and other administrative approvals required to facilitate industrial recruitment efforts for properties located on the former Navy Base. Nothing herein will be construed as requiring the City's support for any action or proposed action

¹ City issued permits include site disturbance permits, MS4 stormwater permits, and construction permits. Nothing in this Agreement will be deemed to exempt any party or successor from the payment of uniformly applicable stormwater utility fees.

that would violate applicable law. Commerce agrees that it will work cooperatively with the City and when possible communicate with the City sufficiently in advance such that City input can be reasonably incorporated into proposals and initiatives.

D. SCE&G Easements

As a result of the condemnation actions commenced by Public Railways for the ICTF project, it will be necessary for SCE&G to obtain easements associated with the new electrical substation to serve the Clemson Wind Turbine Drivetrain Testing Facility. Public Railways will work with SCE&G in locating the property for these easements and executing the necessary easements; provided, however, that such easements will not be located in the Officer Housing Area, which Public Railways will transfer to the City as provided in Section II.A.1. herein.

IV. RELEASES & LITIGATION COSTS

A. Releases

1. City

The City for itself, successors and assigns, does hereby release, acquit, and forever discharge Public Railways and Commerce and their officials, agents, all employees thereof, associated entities, and/or successors thereto from any and all claims, demands, damages, actions, causes of action, and suits at law or in equity of any kind or nature, arisen, arising, or to arise for any claims or objections to the ICTF, including but not limited to, those based on: (a) the Transfer Agreement dated April 1, 2003 between the RDA and the City, (b) the Transfer Agreement dated July 1, 2003 between the City and the Noisette Company, LLC, (c) the 2002 MOU, and (d) the 2010 MOU between the City, CSX, and Shipyard Creek Associates, Inc. ("2010 MOU"), in order to allow for the implementation of the ICTF and associated railway lines and roadways, establishment of roll-on-roll-off ("RORO") facilities, if needed, and any other activities required to facilitate the movement of cargo to and from the Port of Charleston. This Release specifically includes, but is not limited to, any and all claims for compensation with regard to the following condemnation actions:

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. City of North Charleston, Landowner, Civil Action No. 2010-CP-10-10501 (Tract 12);

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. City of North Charleston, Landowner, Civil Action No. 2010-CP-10-10502 (Tract 13A);
and

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. City of North Charleston, Landowner, Civil Action No. 2010-CP-10-10503 (Tract 13B).

The City further releases all claims for compensation in connection with any condemnation actions in which it is listed as an "Other Condemnee," including but not limited to:

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. Clemson University, Landowner, and Charleston Naval Complex Redevelopment Authority, City of North Charleston, Commissioners of Public Works of the City of Charleston, North Charleston Sewer District, BellSouth Telecommunications, Inc.,

Business Telecom, Incorporated, South Carolina Electric & Gas Company, and Charleston County School District, Other Condemnees, Civil Action No. 2010-CP-10-10495 (Tract 11);

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. City of North Charleston, Landowner, and Charleston Naval Complex Redevelopment Authority, City of North Charleston, Commissioners of Public Works of the City of Charleston, North Charleston Sewer District, BellSouth Telecommunications, Inc., Business Telecom, Incorporated, South Carolina Electric & Gas Company, Other Condemnees, Civil Action No. 2010-CP-10-10501 (Tract 12);

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. City of North Charleston, Landowner, and Charleston Naval Complex Redevelopment Authority, City of North Charleston, Commissioners of Public Works of the City of Charleston, North Charleston Sewer District, BellSouth Telecommunications, Inc., Business Telecom, Incorporated, South Carolina Electric & Gas Company, Other Condemnees, Civil Action No. 2010-CP-10-10502 (Tract 13A);

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. City of North Charleston, Landowner, and Charleston Naval Complex Redevelopment Authority, City of North Charleston, Commissioners of Public Works of the City of Charleston, North Charleston Sewer District, BellSouth Telecommunications, Inc., Business Telecom, Incorporated, South Carolina Electric & Gas Company, Other Condemnees, Civil Action No. 2010-CP-10-10503 (Tract 13B);

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. Charleston Naval Complex Redevelopment Authority, Landowner, and Charleston Naval Complex Redevelopment Authority, Commissioners of Public Works of the City of North Charleston, North Charleston Sewer District, BellSouth Telecommunications, Inc., Business Telecom, Incorporated, South Carolina Electric & Gas Company, Other Condemnees, Civil Action No. 2011-CP-10-2257 (Tract 14);

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. Carolina Maritime Company of Charleston, Inc., f/k/a Carolina Shipping Company, Inc., Landowner, and Container-Care South Carolina, Inc., County of Charleston, Southern Bell Telephone and Telegraph Company, South Carolina Electric & Gas Company, Commissioners of Public Works of the City of Charleston, and North Charleston Sewer District, Other Condemnees, Civil Action No. 2011-CP-10-189 (Tract 16);

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. Charleston Naval Complex Redevelopment Authority, Landowner, and Charleston Naval Complex Redevelopment Authority, Commissioners of Public Works of the City of Charleston, North Charleston Sewer District, BellSouth Telecommunications, Inc., Business Telecom, Incorporated, South Carolina Electric & Gas Company, Other Condemnees, Civil Action No. 2011-CP-10-2258 (Tract 17); and

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. North Charleston Sewer District, Landowner, and Charleston Naval Complex Redevelopment Authority, Commissioners of Public Works of the City of Charleston, North Charleston Sewer District, BellSouth Telecommunications, Inc., Business Telecom,

Consistent with the City's relinquishment of all "other condemnee" claims as described above, Public Railways and City will execute and file an appropriate Order dismissing the City as a party with prejudice from the above referenced actions.

2. Clemson Tract

The City has previously asserted certain rights of reverter and repurchase in connection with the property which is the subject of the condemnation action in *South Carolina Department of Commerce, Division of Public Railways v. Clemson University, et al.*, Civil Action No. 2010-CP-10-10495. These assertions by the City were based upon language contained in the following deeds transferring the aforesaid property from the City to Clemson University: Deed given by the City to Clemson University, dated February 28, 2007, and recorded September 21, 2007 in Deed Book F-639 at page 773; Deed given by the City to Clemson University, dated February 8, 2010, and recorded February 9, 2010 in Deed Book 0106 at page 292; and Deed given by the City to Clemson University, dated February 8, 2010, and recorded February 9, 2010 in Deed Book 0106 at page 290. The City further acknowledges that no rights associated with said deeds will be asserted against Public Railways, Commerce, or other entity in the future and is entitled to no compensation with regard to the condemnation action. Nothing in this paragraph will be construed to waive any legal positions that the City may have available to assert against parties other than the Department of Commerce and/or Division of Public Railways in *Charleston County School District v. Clemson University, City of North Charleston and the South Carolina Department of Commerce, Division of Public Railways*, Civil Action No. 2012-CP-10-5093.

3. Commerce/Public Railways

Commerce and Public Railways for themselves and their successors and assigns, do hereby release, acquit, and forever discharge the City and its officials, agents, all employees thereof, and/or successors thereto from any and all claims, counterclaims, demands, damages, actions, causes of action, and suits at law or in equity of any kind or nature, arisen, arising, or to arise for any claims or objections to the ICTF, including but not limited to, those based on: (a) the Transfer Agreement dated April 1, 2003 between the RDA and the City, (b) the Transfer Agreement dated July 1, 2003 between the City and the Noisette Company, LLC, (c) the 2002 MOU, and (d) the 2010 MOU, in order to allow for the implementation of the ICTF and associated railway lines and roadways, establishment of RORO facilities, if needed, and any other activities required to facilitate the movement of cargo to and from the Port of Charleston.

4. CHSA, LLC Litigation

The Parties acknowledge and agree that the City is a necessary party to the action by CHSA, LLC, Commerce, and Public Railways against the Noisette Company, LLC and others bearing Civil Action No. 2011-CP-10-1959. Commerce and Public Railways have agreed in Section IV.C. herein to be responsible for certain litigation expenses as outlined in that section, including expenses associated with the action referenced in this Section IV.A.4. In exchange, the City waives any rights as a necessary party in the action by CHSA, LLC, Commerce, and Public Railways and agrees to withdraw any responsive pleadings and to be bound by any judgment or agreement obtained in that action after the Effective Date.

B. Dismissal of Lawsuits

The Parties agree to dismiss with prejudice the following condemnation actions:

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. City of North Charleston, Landowner, Civil Action No. 2010-CP-10-10501 (Tract 12);

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. City of North Charleston, Landowner, Civil Action No. 2010-CP-10-10502 (Tract 13A);
and

South Carolina Department of Commerce, Division of Public Railways, Condemnor v. City of North Charleston, Landowner, Civil Action No. 2010-CP-10-10503 (Tract 13B).

C. Litigation Costs

Commerce and Public Railways jointly agree that they will be responsible for \$250,000.00 of the litigation expenses incurred by the City after the Effective Date ("Litigation Expenses") in litigation against the City by a third party concerning, arising from, or in any way relating to the location of the ICTF, the direction of the rail traffic associated with that facility, or the City's execution of or performance under this Agreement. Such litigation includes, but is not limited to, *Charleston County School District v. Clemson University, City of North Charleston and the South Carolina Department of Commerce, Division of Public Railways*, Civil Action No. 2012-CP-10-5093, *CHSA, LLC and South Carolina Department of Commerce, Division of Public Railways v. The Noisette Company, LLC, et al.*, Civil Action No. 2011-CP-10-1959, and the 2010 MOU. These Litigation Expenses include litigation costs, fees (including attorneys' fees), and the payment of any settlement or judgment. In the event that the aforesaid \$250,000.00 contribution by Commerce and Public Railways is fully expended, the Parties agree that the City will be responsible for 50% of any further Litigation Expenses, and Commerce and Public Railways will jointly be responsible for the other 50% of such Litigation Expenses.

The Parties further agree that each party will be responsible for its own attorney fees and costs in the condemnation actions identified herein in section IV.A.1, the right to take challenge actions identified in section III.B.1, and the Declaratory Judgment Action identified in section III.B.2.

V. GENERAL TERMS

1. Effective Date

The Parties hereby consent to a Consent Order adopting and incorporating the provisions of this Agreement. The effective date of this Agreement will be the date on which the circuit court Order is entered.

2. Governing Law

This Agreement will be governed by and construed in accordance with the laws of the State of South Carolina and any applicable federal laws. Nothing herein shall be construed as requiring the Parties to support or undertake any action that would violate applicable state or federal laws.

3. Notices

Any notice to be given hereunder will be in writing and sent by registered or certified mail, return receipt requested, addressed as follows or such other address as may be specified in writing by one party to another:

South Carolina Department of Commerce
c/o Karen Blair Manning, Esquire
1201 Main Street, Suite 1600
Columbia, SC 29201

South Carolina Public Railways
c/o Mr. Jeffrey M. McWhorter
540 East Bay Street
Charleston, SC 29403

WITH A COPY TO:

Derek F. Dean, Esquire
Simons & Dean
147 Wappoo Creek Drive, Ste. 604
Charleston, SC 29412

The City of North Charleston
c/o Mr. Ray Anderson
Post Office Box 190016
North Charleston, SC 29419-9016

WITH A COPY TO:

J. Brady Hair, Esquire
Law Office of J. Brady Hair
Post Office Box 61896
North Charleston, SC 29419

North Charleston Sewer District
Jimmy L. Green, Manager
P.O. Box 63009
North Charleston, SC 29419

WITH A COPY TO:

David Jennings, Esquire
Rosen, Rosen & Hagood
PO Box 893
Charleston, SC 29402

4. Enforcement & Attorneys' Fees

The Parties agree that the Court of Common Pleas for the Ninth Judicial Circuit in Charleston County, South Carolina will retain continuing jurisdiction over this matter to enforce the terms of this Agreement. The Parties further agree that in the event of breach of this Agreement resulting in legal action each party will be responsible for its own attorneys' fees and costs.

5. Complete Defense

Except with regard to actions seeking to enforce the terms of or performance under this Agreement, this Agreement will be treated as a complete defense to any legal, equitable, judicial or administrative action that may be brought, instituted, or taken by any of the Parties relating to all matters and claims as set forth herein.

6. Entire Agreement

The Parties agree that this Agreement will not be subject to any claims of mistake of fact, that it expresses a full and complete settlement, regardless of the adequacy or inadequacy of the amounts paid or properties transferred, that it is intended to avoid further litigation and that it is to be final and complete. The Parties agree that there is absolutely no agreement or reservation not clearly expressed herein, that the consideration paid herein is all that the Parties are to receive for all claims for damages, liquidated damages, costs, attorneys' fees and other expenses and that the execution hereof is with the full knowledge that this Agreement releases all claims and ends such litigation by and among the Parties as set forth in Section IV herein.

7. Contingency for Dismissal of Counterclaims

The obligations set forth in this Settlement Agreement are contingent upon the dismissal of Counterclaims filed by the South Carolina Department of Commerce, Public Railways, the State Ports Authority, the State of South Carolina, and/or any other state affiliate, in *City of North Charleston v. State Ports Authority, South Carolina Department of Commerce, South Carolina Department of Commerce, Division of Public Railways, State of South Carolina*, Civil Action No. 2011-CP-10-5550.

8. Severability

Each provision of this Agreement is intended to be severable. If any term or provision is held to be invalid, void or unenforceable by a court of competent jurisdiction for any reason whatsoever, such ruling will not affect the remainder of this Agreement.

9. Assignment

The rights and obligations of the Parties to this Agreement may not be assigned without the written consent of the other Parties.


10. Headings

Headings contained in this Agreement are for convenience of reference only and are not intended to alter or vary the construction and meaning of this Agreement.


11. Counterparts

This Agreement may be executed simultaneously in two or more counterparts, each of which will be deemed an original.

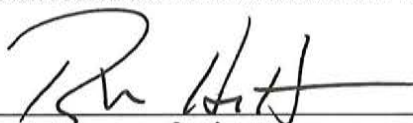
CITY OF NORTH CHARLESTON

By: 
Title: Mayor
Date: 12/4/12


NORTH CHARLESTON SEWER DISTRICT

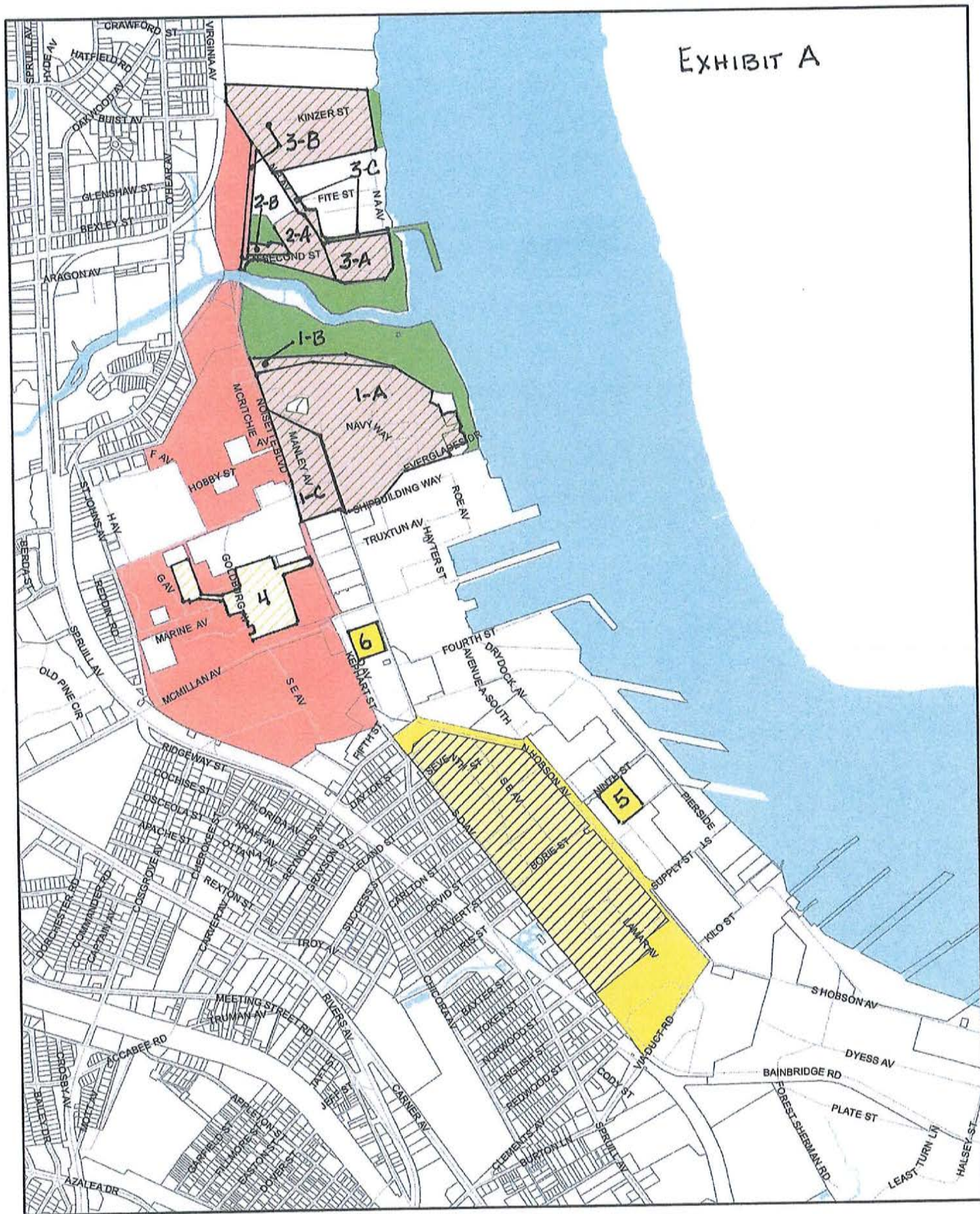
By: 
Title: Chairman
Date: 12/4/12

SOUTH CAROLINA DEPARTMENT OF COMMERCE

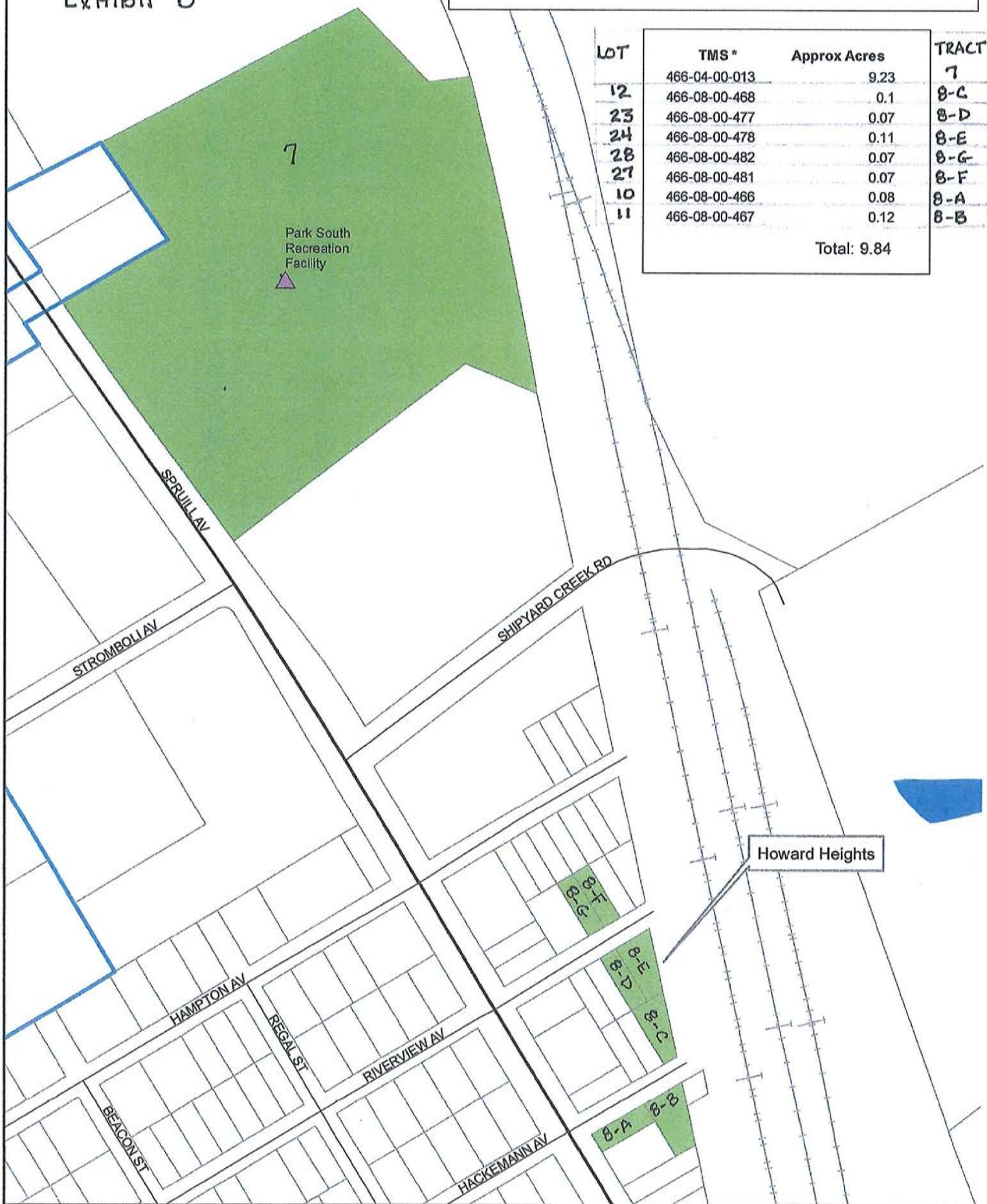
By: 
Title: Secretary of Commerce
Date: 12/5/12

SOUTH CAROLINA PUBLIC RAILWAYS

By: 
Title: President + CEO
Date: 12/5/12



Howard Heights and Park South



LOT	TMS *	Approx Acres	TRACT
	466-04-00-013	9.23	7
12	466-08-00-468	0.1	8-C
23	466-08-00-477	0.07	8-D
24	466-08-00-478	0.11	8-E
28	466-08-00-482	0.07	8-G
27	466-08-00-481	0.07	8-F
10	466-08-00-466	0.08	8-A
11	466-08-00-467	0.12	8-B

Total: 9.84

